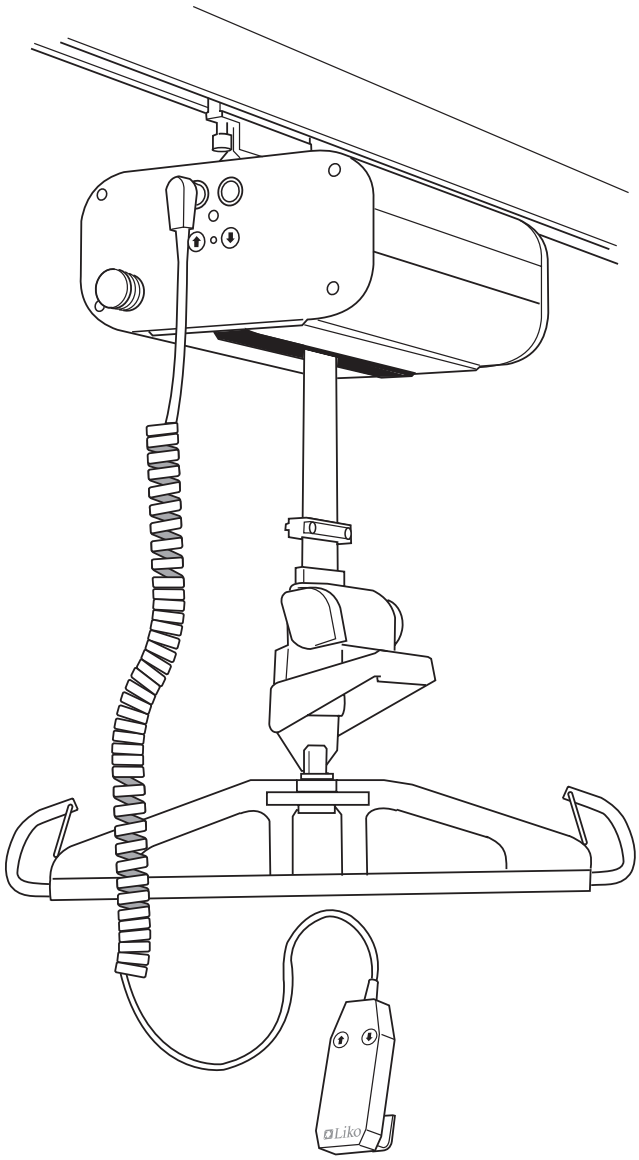
10:1

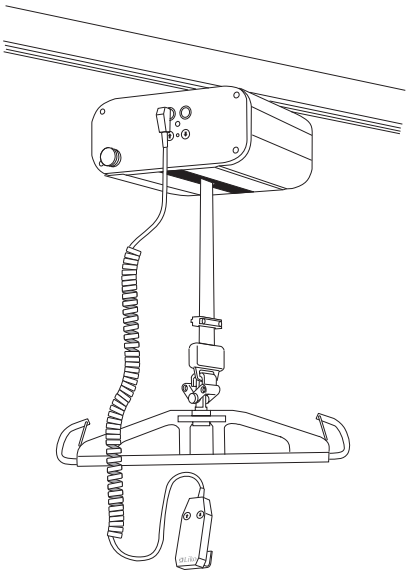
Service Manual

Likorall 242 ES/242 ES R2R
242 S/242 S R2R

Doc.No. 7SE120401-01

2003-10-23





Liko

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Likorall 242 ES/242 ES R2R 242 S/242 S R2R

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Innehållsförteckning

Likorall 242 ES/242 ES R2R 242 S/242 S R2R

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Care and Maintenance

Checklist
For safe and troublefree operation, there are a few routine measures which should be performed every day the lift is used.

- Inspect the lift and check for any external damage.
- Check the connecting joints of the sling bar.
- Check the lift strap for wear and that the strap is not twisted.
- Check the function of the safety latch.
- Check the control function of the lift movement.
- Check that the lifting height is correctly adjusted and that the emergency-lowering device works.
- Charge the batteries every day the lift is used, and check that the battery charger works.

As needed, clean the lift with warm water or disinfectant. Caution! Do not use cleaning products that contain phenol or chlorine, since it can damage the aluminum and polyamide material.

Inspection and Control
Likorall should be thoroughly inspected for wear of parts at least once per year. Inspection should be in accordance with Liko service instructions and conducted by authorized individuals.

> △ **WARNING!**
> Use only authorized Liko service personnel and Liko spare parts.

Transport and Storing
During transportation, or when the patient lift is not to be used for some time, the emergency button should be pushed in. When storing, keep the patient lift at a temperature exceeding freezing point and at a relative humidity no more than 60%.

We always try to improve our products. Naturally, this means changes from time to time.
Please contact our local representative or visit www.liko.com to receive the latest updates.

Tillsyn och underhåll

För att försäkra sig om en problemfri användning är det vissa detaljer som bör kontrolleras varje dag lyften används.

- Inspektera lyften och kontrollera att inga yttre skador har skett.
- Kontrollera infästningen av lyftbygeln.
- Kontrollera lyftbandets slitage, samt att bandet inte är vridet.
- Kontrollera urkrokningsskyddens funktion.
- Kontrollera manövreringen av lyftrörelsen.
- Kontrollera att lyfthöjden är korrekt inställd och att nödsänkningen fungerar.
- Ladda batterierna varje dag lyften använts och kontrollera då att laddaren fungerar.

Vid behov, rengör lyften med varmt vatten eller tvättsprit. OBS! Använd inte rengöringsmedel som innehåller fenol eller klor, då detta kan skada aluminium- och polyamidmaterialen.

Tillsyn och kontroll

Likorall skall genomgå kontroll minst en gång per år av förslitningsdetaljer.
Utföres i enlighet med Likos serviceinstruktion och av auktoriserad personal.

△ VIKTIGT!
Reparation och underhåll får endast utföras av Liko auktoriserad personal och med originalreservdelar.

Transport och lagring

Under transport, eller då lyften inte skall användas under en längre tid, bör nödstoppen vara intryckt.
Lyften bör också förvaras frostfritt samt ej över normal luftfuktighet (ca 60%).

Serviceavtal

Liko erbjuder möjlighet att teckna serviceavtal för underhåll och fortlöpande tillsyn av er Likorallanläggning.

Likos produkter utvecklas ständigt varför vi förbehåller oss rätten till ändringar i produkter utan föregående notis. Kontakta din Likorepresentant för information, råd och eventuella uppdateringar.

Made in Sweden

Liko är kvalitetscertifierat enligt ISO 9002 och miljöcertifierat enligt ISO 14001.

Technical specifications

Lifting capacity: 200 kg/440 lbs.
Batteries: Two 12V 2.6 Ah valve-regulated lead-acid gel-type batteries. New batteries are available from Liko.
Battery charger: 100 - 240 VAC 40-60 Hz, max. 0.6 A.
Lifting speed: 5 cm/s
Lifting range: 210 cm (height adjustable)
Power: 24 V 12 A
Lift unit dimensions: 250x125x320 mm. WxHxL 9.8x4.9x12.6 inch. WxHxL

Material: Anodized aluminium.
Emergency lowering: Electrical and mechanical (not mechanical on R2R).
Intermittent operation: Int. Op 10/90, active operation max 6 min. Out of a time of 100, active must be less than 10, though not more than 6 min.

IP Class 43

- Intended for indoor use.
- Type B, according to the degree of protection against electric shock.
- Class II equipment.

Tekniska data

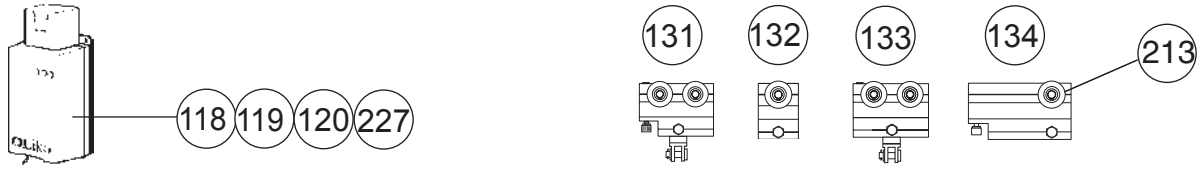
Lyftkapacitet: 200 kg.
Batterier: 2 st 12 V 2,6 Ah. Ventilreglerade blyackar. S.k. gelbatterier. Nya batterier tillhandahålles av Liko.
Batteriladdare: 100 - 240 VAC 40-60 Hz, max 0,6 A.
Lyfthastighet: 5 cm/s.
Lyftområde: 210 cm (inställbart i höjdled).
Eldata: 24 V 12 A
Mått lyftmotor: 250x125x320 mm. BxHxL.

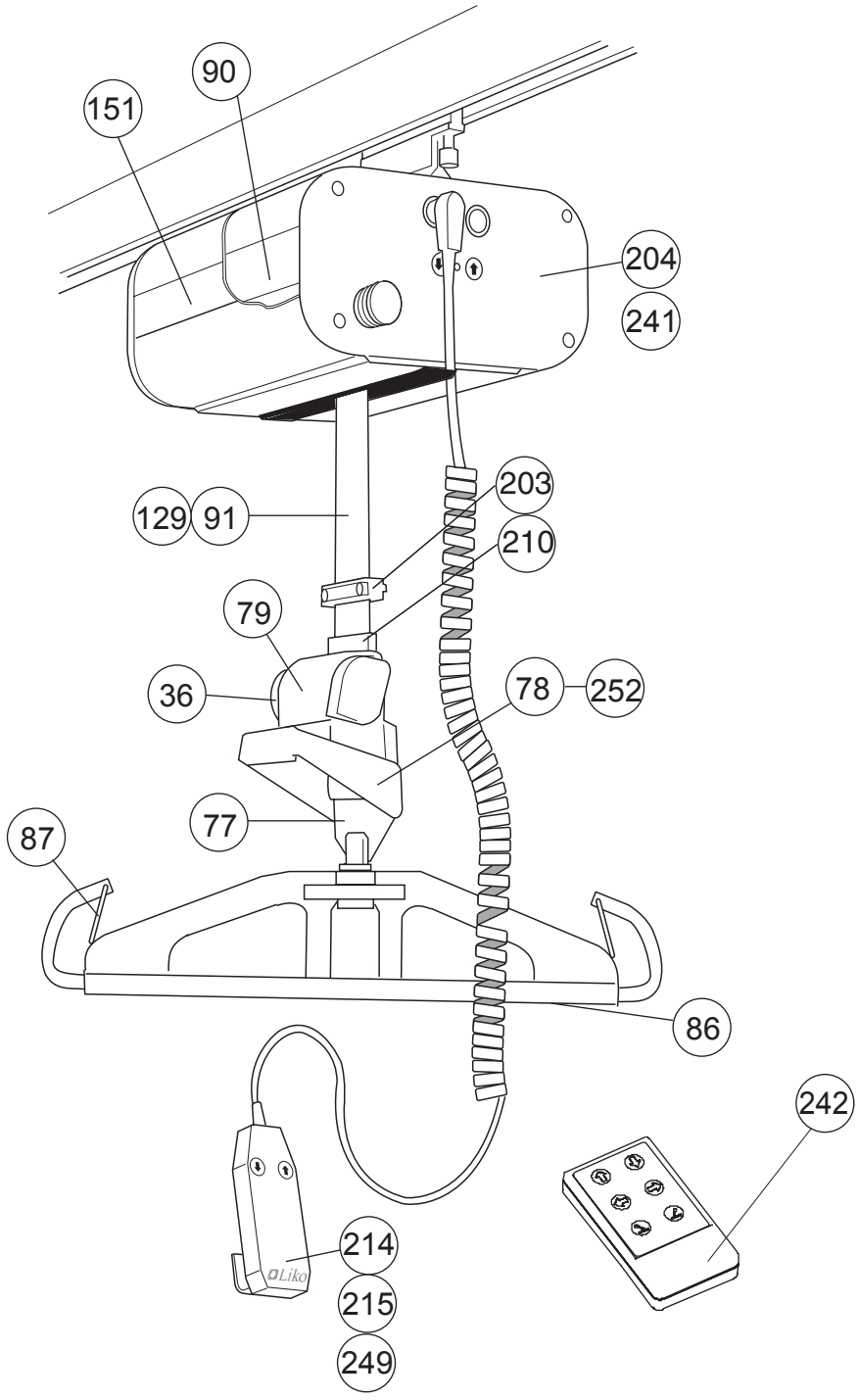
Material: Eloxerad aluminium.
Nödsänkning: Elektrisk och mekanisk (ej mekanisk vid R2R).
Intermittent drift: Int. Op 10/90, aktiv drift max 6 min. Av en tid på 100 får aktiv tid vara 10, dock max 6 min.
IP klass 43

Avsedd för inomhusbruk.
Typ B, enligt skyddsgrad mot elektrisk chock.
Klass II utrustning.

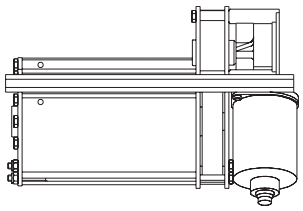
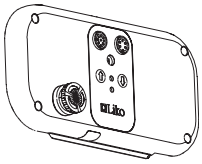
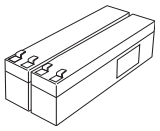
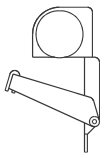
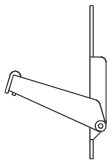
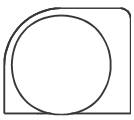
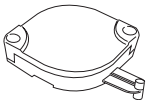
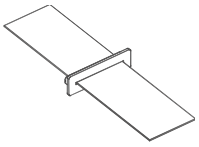
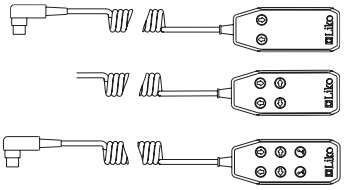
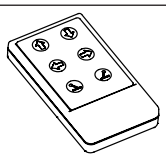
Positions Likorall

242ES/242ES R2R, 242S/242S R2R

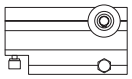
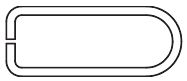
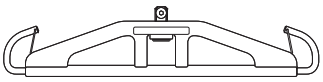
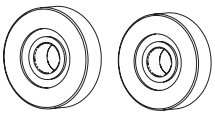
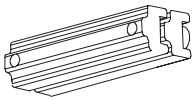
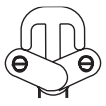




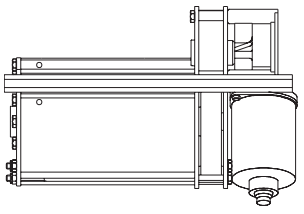
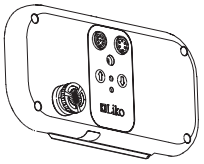
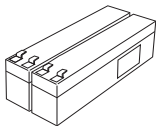
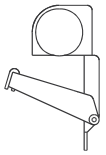
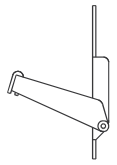
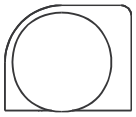
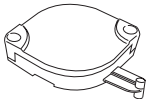
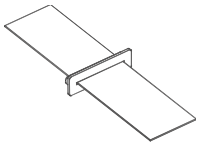
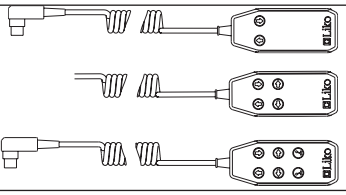
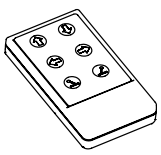
Spareparts Likorall 242ES/242ES R2R, 242S/242S R2R

PART.NO	POS.NO	ARTICLE	UNIT	
31290054	151	Actuator Restoration set LR 242	pce	
31290058 31290062	204 241	Electronic Card with Cover ES Electronic Card with Cover S	pce pce	
31290007	90	Battery 2,6 Ah/12 V	pce	
31190006	77	Emergency Lowering Device	pce	
31190007	78	Body/Handle set for Emergency Lowering Device	pce	
31190021	252	Body/Handle set for Emergency Lowering Device (Stainless steel)	pce	
31190008	79	Plastic Housing	pce	
20090041	36	Spring Magazine	pce	
31290011 31290028	91 129	Lift Strap Likorall Lift Strap Likorall R2R	pce pce	
3126034 3126036 3126038	214 215 249	Hand Control LR 242ES, 2.Button Hand Control LR 242ES, 4.Button Hand Control LR 242ES, 6.Button	pce pce pce	
3126060	242	Hand Control Remote 242ES	pce	

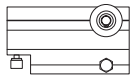
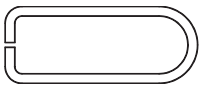
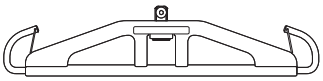
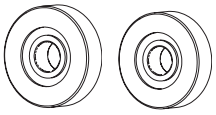
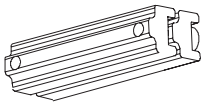
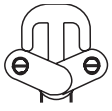
Spareparts Likorall 242ES/242ES R2R, 242S/242S R2R

PART.NO	POS.NO	ARTICLE	UNIT	
3126013	134	Carriage Part with Brake	pce	
3126017	132	Carriage Part without Brake	pce	
3126015	131	Carriage for R2R, with Brake	pce	
3126014	133	Carriage for Likorall R2R	pce	
3126101 3126102 3126103 3126104	118 119 120 227	Battery charger EU Battery charger UK Battery charger US Battery charger Au/NZ	pce pce pce pce	
31190018	87	Safety Latch	pair	 X 2
3156001	86	Sling Bar Universal 450	pce	
31290060	213	Plastic Wheel with Bearing	set	
31290057	203	Strap Stop	pce	
31290059	210	Movable Strap Stop	10 pce	
31290056	186	Hook R2R	pce	

Reservdelar Likorall 242ES/242ES R2R, 242S/242S R2R

PRODUKT NR	POS NR	PRODUKTBESKRIVNING	ENHET	
31290054	151	Motorpaket LR242	st	
31290058 31290062	204 241	Gavel med kretskort 242ES Gavel med kretskort 242S	st st	
31290007	90	Batteri 2,6 Ah/12 V	st	
31190006	77	Nödsänkning	st	
31190007	78	Stomme/Handtag	st	
31190021	252	Stomme/Handtag ML rostfri	st	
31190008	79	Bandmagasin	st	
20090041	36	Fjäderkassett	st	
31290011 31290028	91 129	Lyftband Likorall Lyftband Likorall R2R	st st	
3126034	214	Handkontroll LR 242 ES, 2-knapp	st	
3126036	215	Handkontroll LR 242 ES, 4-knapp	st	
3126038	249	Handkontroll LR 242 ES, 6-knapp	st	
3126060	242	Fjärrkontroll 242 ES	st	

Reservdelar Likorall 242ES/242ES R2R, 242S/242S R2R

PRODUKT NR	POS NR	PRODUKTBESKRIVNING	ENHET	
3126013	134	Åkvagn med broms	st	
3126017	132	Åkvagnsdel utan broms	st	
3126015	131	Åkvagn R2R, med broms	st	
3126014	133	Åkvagn till Likorall R2R	st	
3126101 3126102 3126103 3126104	118 119 120 227	Laddare väggmonterad EU Laddare väggmonterad UK Laddare väggmonterad US Laddare väggmonterad Au/NZ	st st st st	
31190018	87	Urkrokningsskydd	par	 X 2
3156001	86	Lyftbygel Universal 450	st	
31290060	213	Hjulbana med lager	set	
31290057	203	Bandstopp kompl.	st	
31290059	210	Bandmarkering	set 10st	
31290056	186	Krok R2R	st	

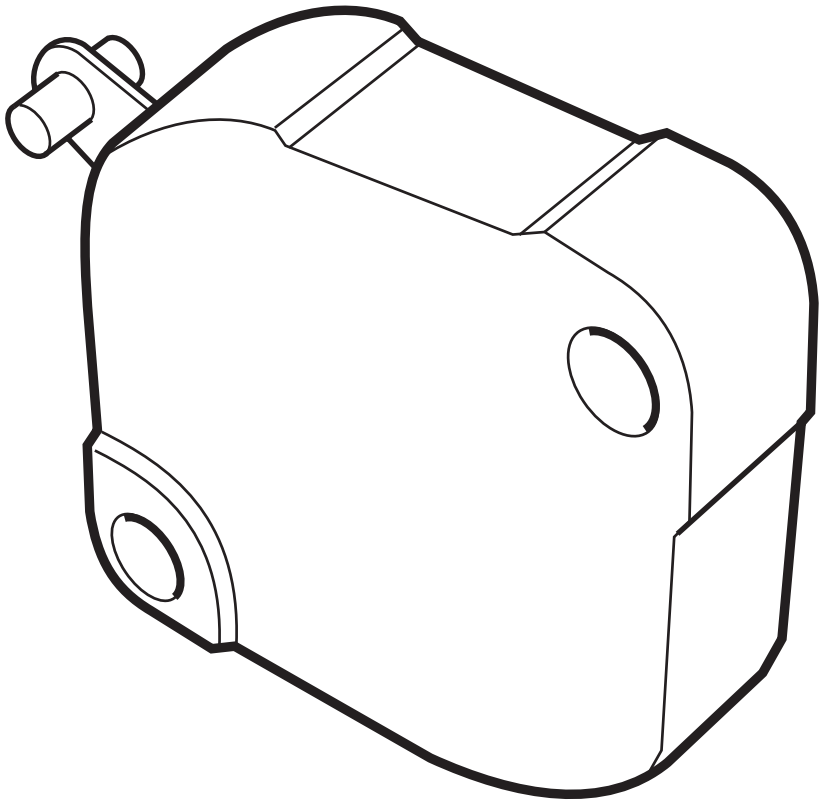
Liko

Spareparts Specification
Reservdelslista

Spring Magazine
Fjäderkassett

Prod.no: 20090041
2003-09-09

Serial no ..... Version ..... Release .....



All details according to drawing no. R 3961204

Details	Detail pos.	Detail no.	Unit
Spring Holder KPL	1	20090041	1

Liko

4.36.1

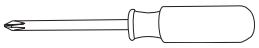
Assembly Instruction
Monteringsanvisning

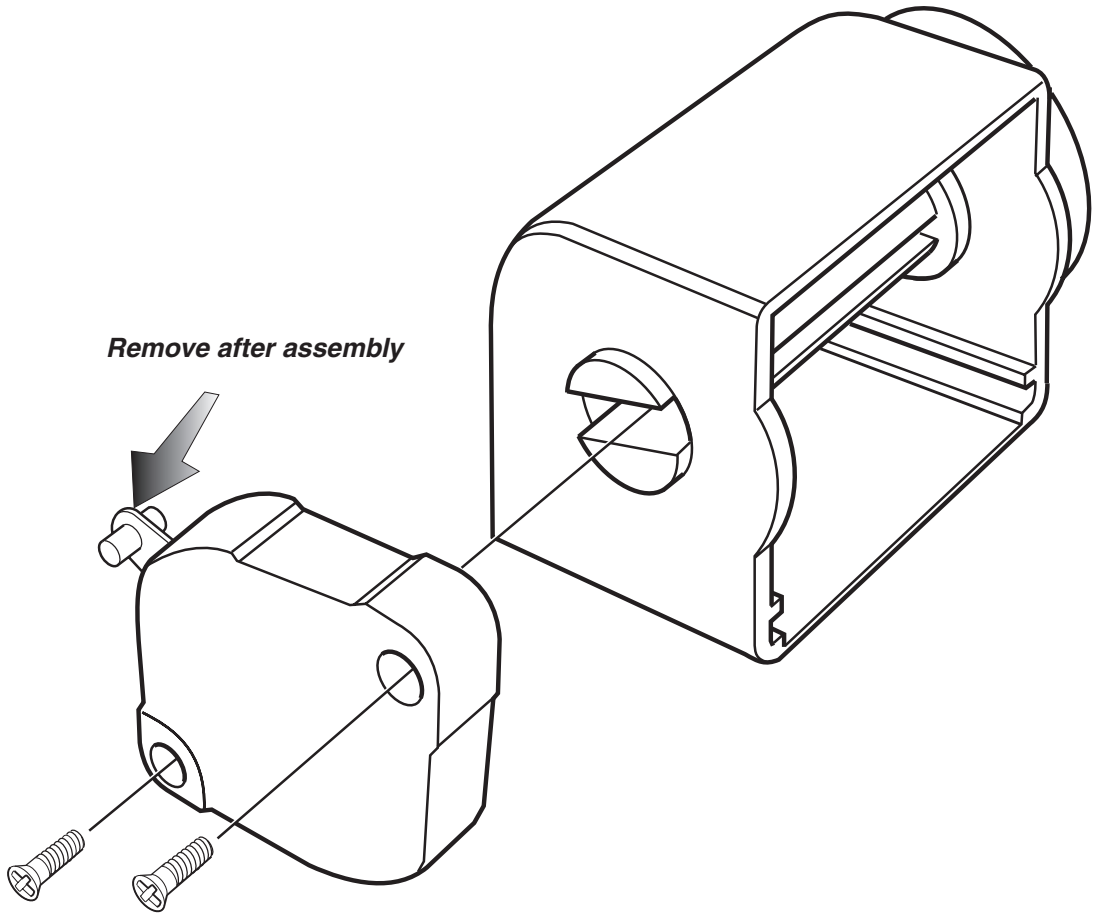
Spring Magazine
Fjäderkassett

Prod.no: 20090041

Doc. no: TI 20090041
2003-09-09

Tools required:

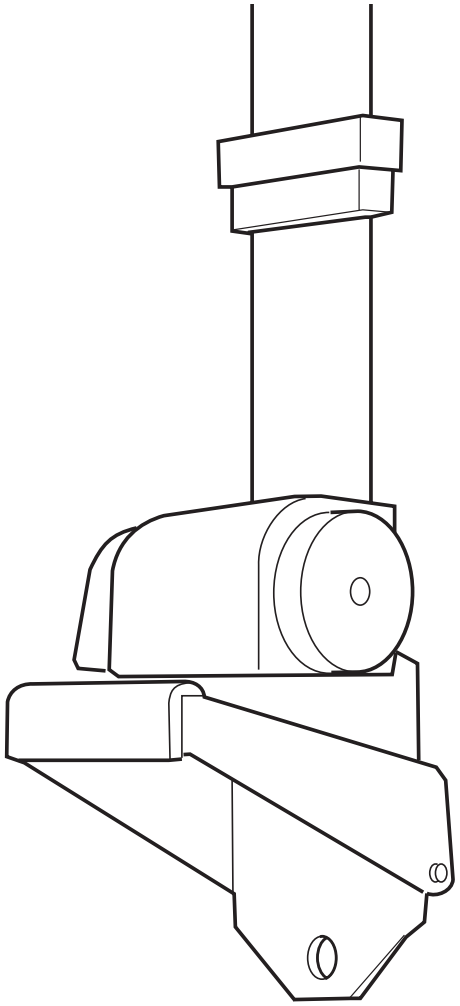




Emergency Lowering Device
Nödsänkning

Prod.no: 31190006
2003-09-09

Serial no ..... Version ..... Release .....



All details according to drawing no. R 3961204

Details	Detail pos.	Detail no.	Unit.
Spring Holder KPL	1	900000106	1
Locking Pin 3*48	7	900000570	1
Friction Profile	15	900000571	1
Plastic Housing	4	901891202	1
Strap shaft	3	901901202	1
Wheel (right)	9	901912022	1
Screw K6S M5*12	10	930000082	1
Screw KXT B4x9,5	2	930000107	2
Tube 10/12 L=60mm	5	930000108	1

Details	Detail pos.	Detail no.	Unit
Nut M6M M5	8	930000230	1
Pin D=6 L=30	13	931891206	2
Torsion spring	12	900000109H	1
Torsion spring	12	900000109V	1
Axle stop right	14	901901207H	1
Axle stop left	14	901901207V	1
Baseplate	11	90191201C	1
Baseplate 2	16	90191201D2	1

Liko

4.77.1

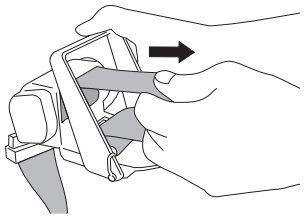
Assembly Instruction
Monteringsanvisning

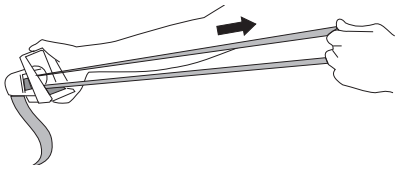
Emergency Lowering Device
Nödsänkning

Prod.no: 31190006

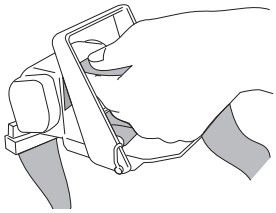
Doc. no: TI 31190006
2003-09-09

Tools required:

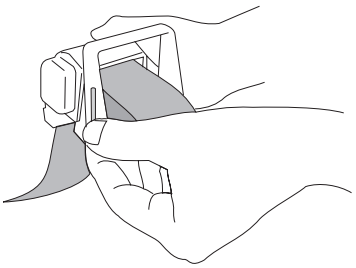




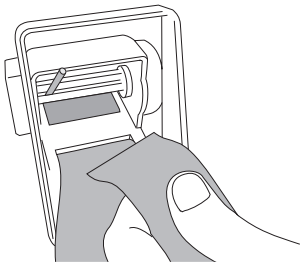
1. Pull the strap all the way out.



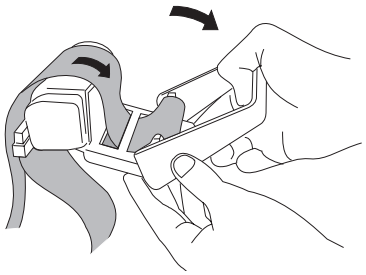
2. Hold the springloaded wheel and release the strap by removing the pin.



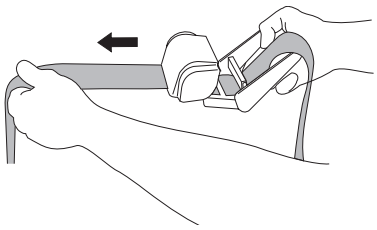
3. Remove the pin.△ Do not let go of the springloaded wheel, since the tension will release.



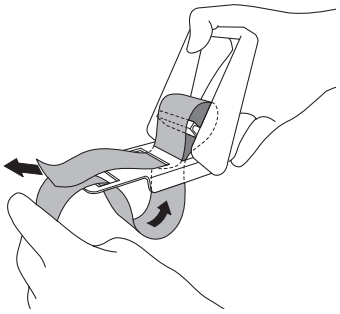
4. Use the pin to lock the axle where the strap was mounted.



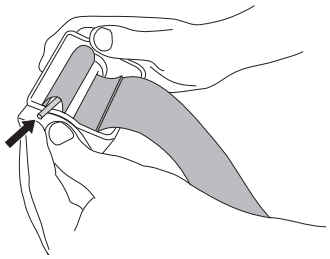
5. Push the emergency lowering handle down and pull the strapa way.



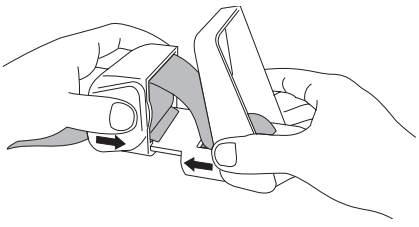
6. Pull the rest of the strap out and remove the plastic housing.



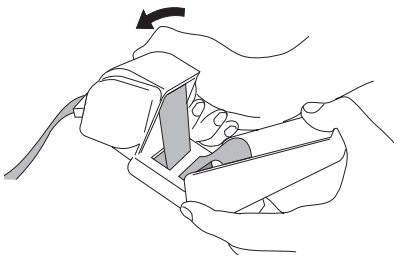
7. Mount the new strap through the plastic housing with the red mark towards the plastic housing and then as shown above.



8. Mount the strap through the slot in the axle and the same way back. **Note!** The axle has two different sides. Place the pin as shown to lock the strap.△ Do not let go of the springloaded wheel, since the tension will release.



9. Push the plastic housing on to the strap joint.



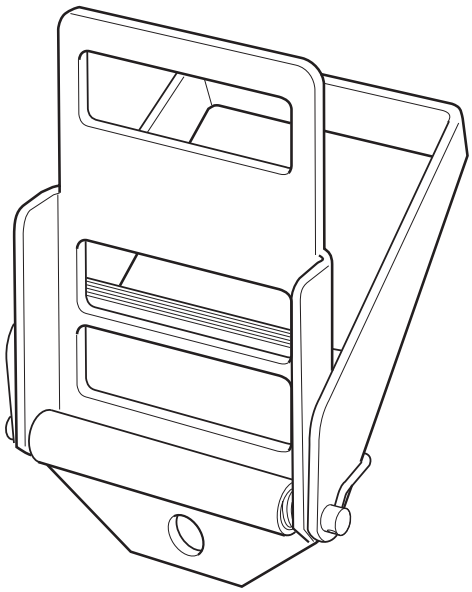
10. Roll up the strap until the red mark reaches the plastic housing.

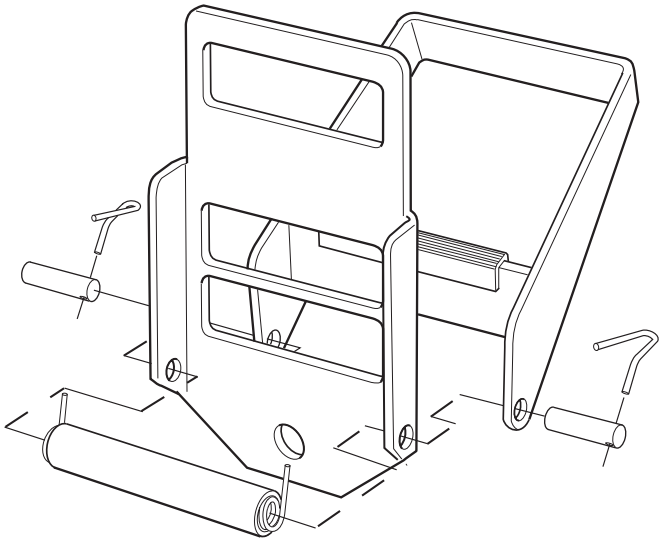
⚠ **After changing Emergency Lowering Device the lift must be tested with maximum load**
And the emergency lowering with 50Kg

Body/Handle set for Em. Low. Dev.
Stomme/handtag

Prod.no: 31190007
2003-09-09

Serial no ..... Version ..... Release .....





All details according to drawing no. R 3961204

Details	Detail pos.	Detail no.	Unit
Friction Profile	15	900000571	1
Tube 10/12 L=60mm	5	930000108	1
Nut M6M M5	8	930000230	1
Pin D=6 L=30	13	931891206	2
Torsion spring l/r	12	900000109H	1

Details	Detail pos.	Detail no.	Unit
Torsion spring l/r	12	900000109V	1
Axle stop right	14	901901207H	1
Axle stop left	14	901901207V	1
Baseplate	11	90191201C	1
Baseplate 2	16	90191201D2	1

Liko

4.78.1

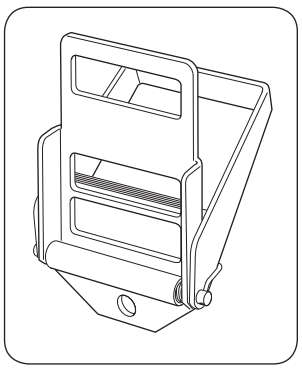
Assembly Instruction
Monteringsanvisning

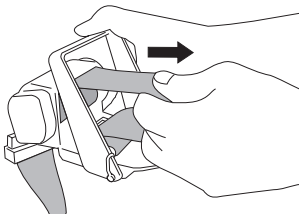
Body/Handle set for Em. Low. Dev.
Stomme/handtag

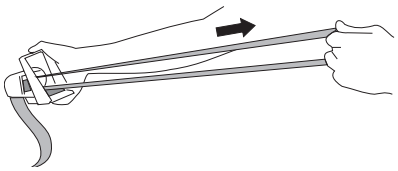
Prod.no: 31190007

Doc. no: TI 31190007
2003-09-09

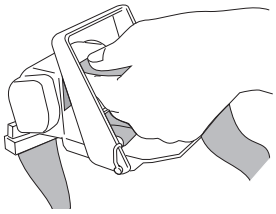
Tools required:



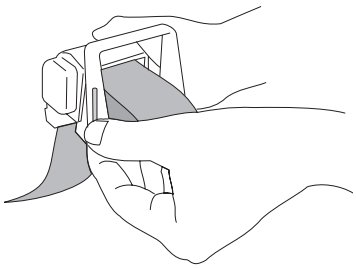




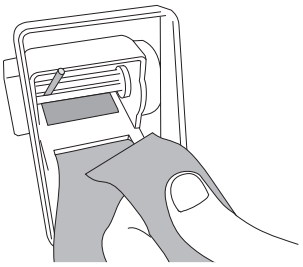
1. Pull the strap all the way out.



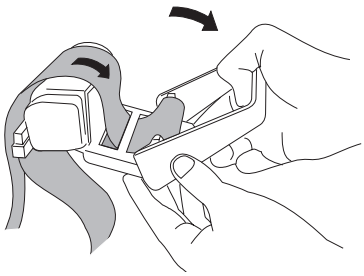
2. Hold the springloaded wheel and release the strap by removing the pin.



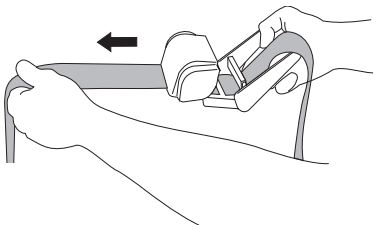
3. Remove the pin.△ Do not let go of the springloaded wheel, since the tension will release.



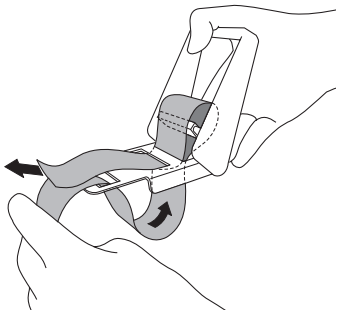
4. Use the pin to lock the axle where the strap was mounted.



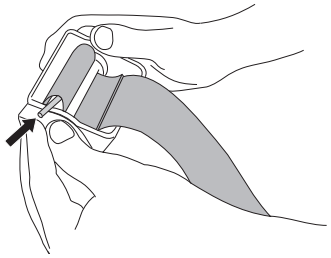
5. Push the emergency lowering handle down and pull the strap away.



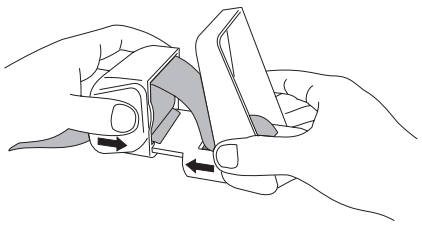
6. Pull the rest of the strap out and remove the plastic housing.



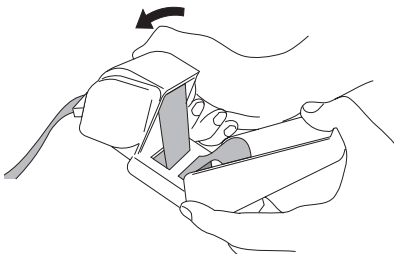
7. Mount the new strap through the plastic housing with the red mark towards the plastic housing and then as shown above.



8. Mount the strap through the slot in the axle and the same way back. **Note!** The axle has two different sides. Place the pin as shown to lock the strap.△ Do not let go of the springloaded wheel, since the tension will release.



9. Push the plastic housing on to the strap joint.



10. Roll up the strap until the red mark reaches the plastic housing.

⚠ **After changing Emergency Lowering Device the lift must be tested with maximum load**
And the emergency lowering with 50Kg

Liko

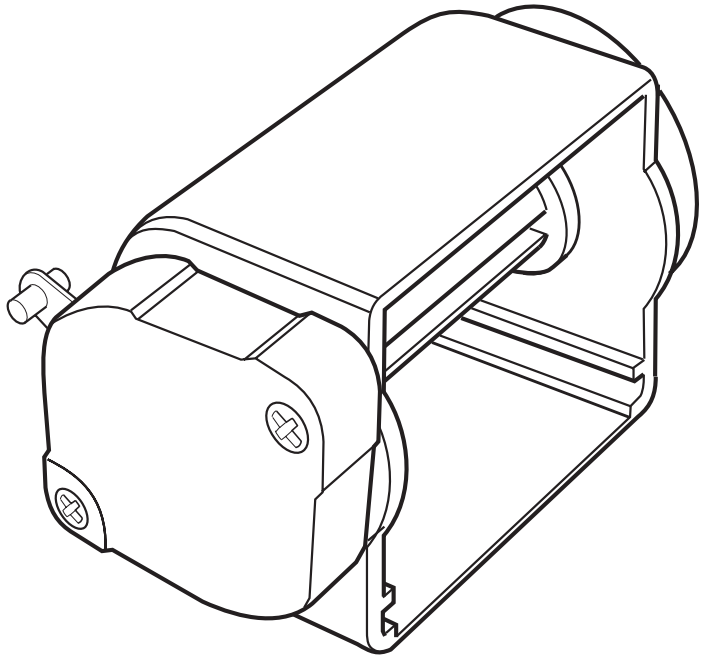
4.79

Spareparts Specification
Reservdelslista

Plasic Housing
Bandmagasin

Prod.no: 31190008
2003-09-09

Serial no ..... Version ..... Release .....



All details according to drawing no. R 3961204

Details	Detail pos.	Detail no.	Unit
Spring Holder KPL	1	900000106	1
Pin 3*48	7	900000570	1
Plastic Housing	4	901891202	1
Strap shaft	3	901901202	1

Details	Detail pos.	Detail no.	Unit
Wheel (right)	9	901912022	1
Screw K6S M5*12	10	930000082	1
Screw KXT B4x9,5	2	930000107	2

Liko

4.79.1

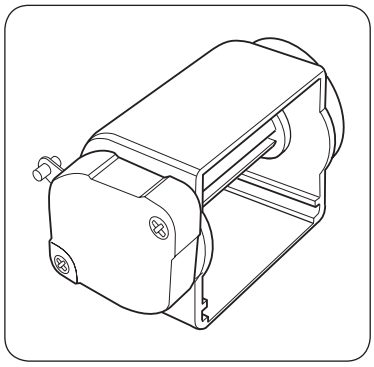
Assembly Instruction
Monteringsanvisning

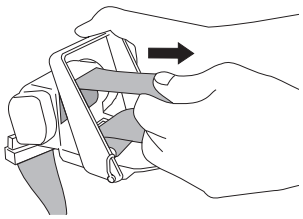
Plasic Housing
Bandmagasin

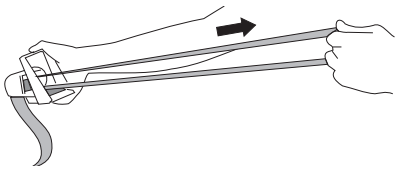
Prod.no: 31190008

Doc. no: TI 31190008
2003-09-09

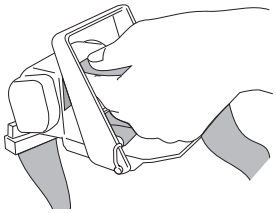
Tools required:



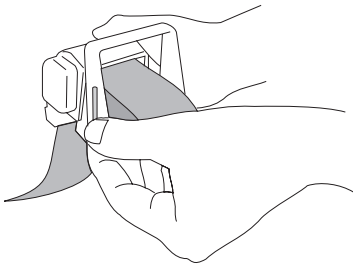




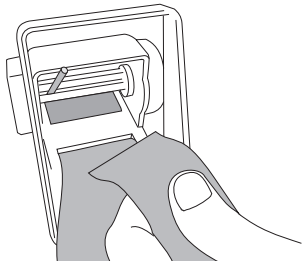
1. Pull the strap all the way out .



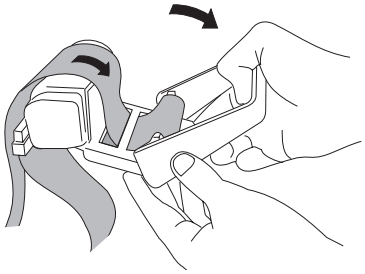
2. Hold the springloaded wheel and release the strap by removing the pin.



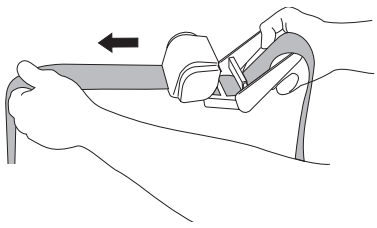
3. Remove the pin.△ Do not let go of the springloaded wheel, since the tension will release.



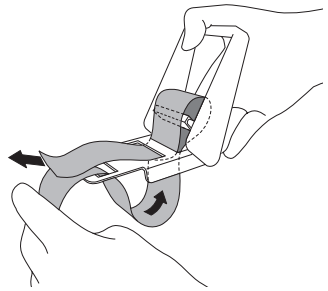
4. Use the pin to lock the axle where the strap was mounted.



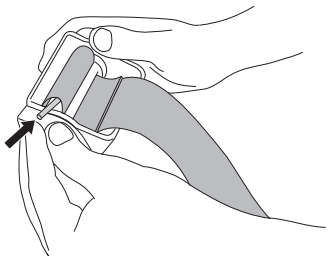
5. Push the emergency lowering handle down and pull the strap away.



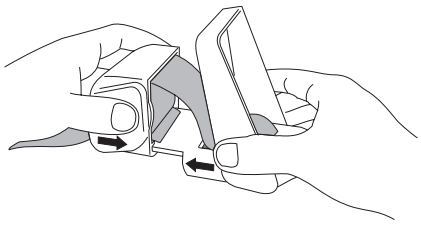
6. Pull the rest of the strap out and remove the plastic housing.



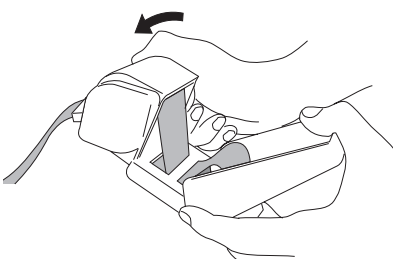
7. Mount the new strap through the plastic housing with the red mark towards the plastic housing and then as shown above.



8. Mount the strap through the slot in the axle and the same way back. **Note!** The axle has two different sides. Place the pin as shown to lock the strap.△ Do not let go of the springloaded wheel, since the tension will release.



9. Push the plastic housing on to the strap joint.



10. Roll up the strap until the red mark reaches the plastic housing.

⚠ **After changing plastic housing the lift must be tested with maximum loadAnd the emergency lowering with 50Kg**

Liko

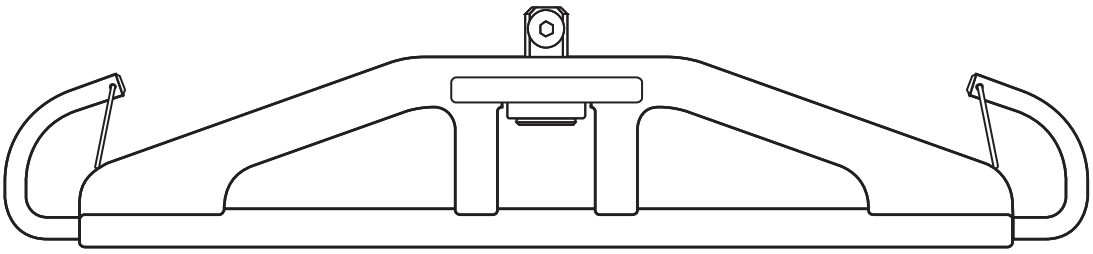
4.86

Spareparts Specification
Reservdelslista

Sling Bar Universal 450
Lyftbygel Universal 450

Prod.no: 3156001
2003-09-09

Serial no ..... Version V2 ..... Release .....



Details	Detail pos.	Detail no.	Unit
Body (slingbar)		901891210	1
Safety Latch		900000177	2
Center Bolt Slingbar		901953162	1
Bearing Uni Slingbar 51104		920000178	1

Details	Detail pos.	Detail no.	Unit
Cover bearing Uni Slingbar		901495317	1
O-ring		901003526	1
K6S M10*25		930000179	1
Locking nut M10 Nyloc		930000010	1

Liko

4.86.1

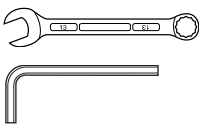
Assembly Instruction
Monteringsanvisning

Sling Bar Universal 450
Lyftbygel Universal 450

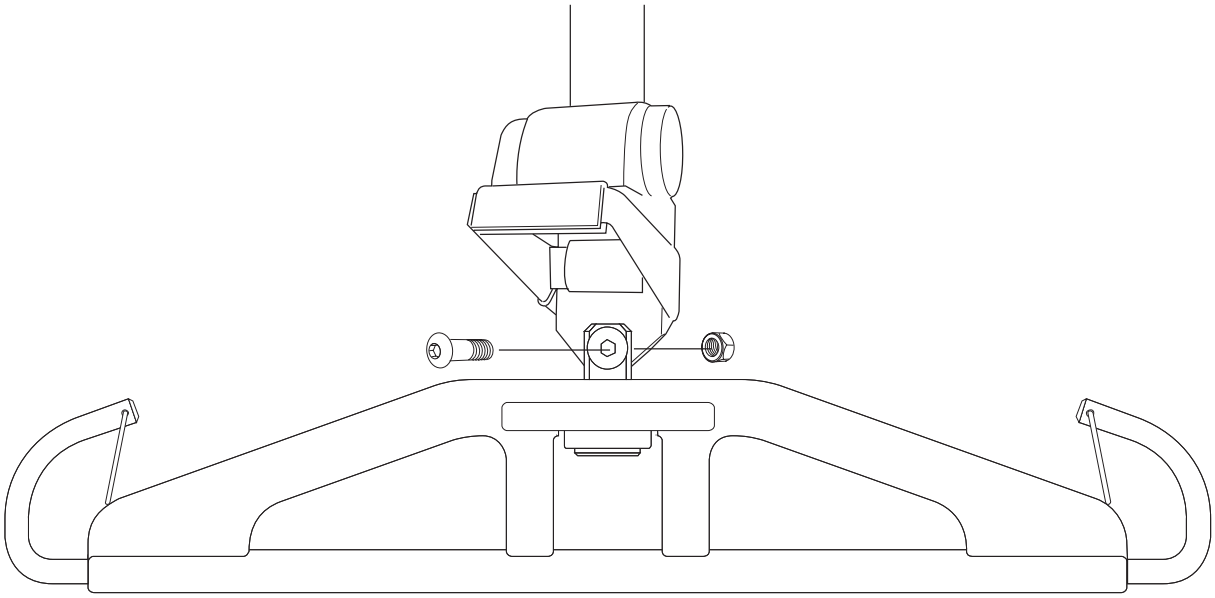
Prod.no: 3156001

Doc. no: TI 3156001
2003-09-09

Tools required:



17 mm
6 mm



Liko

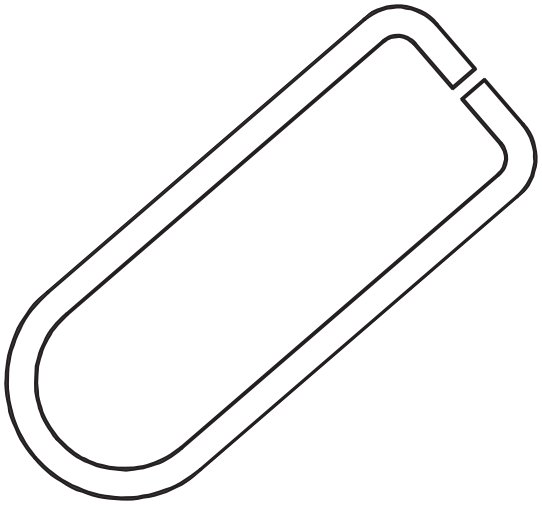
4.87

Spareparts Specification
Reservdelslista

Safety Latch
Urkrokningsskydd

Prod.no: 31190018
2003-09-09

Serial no ..... Version ..... Release .....



Details	Detail pos.	Detail no.	Unit
Safety latch		900000177	2

Liko

4.87.1

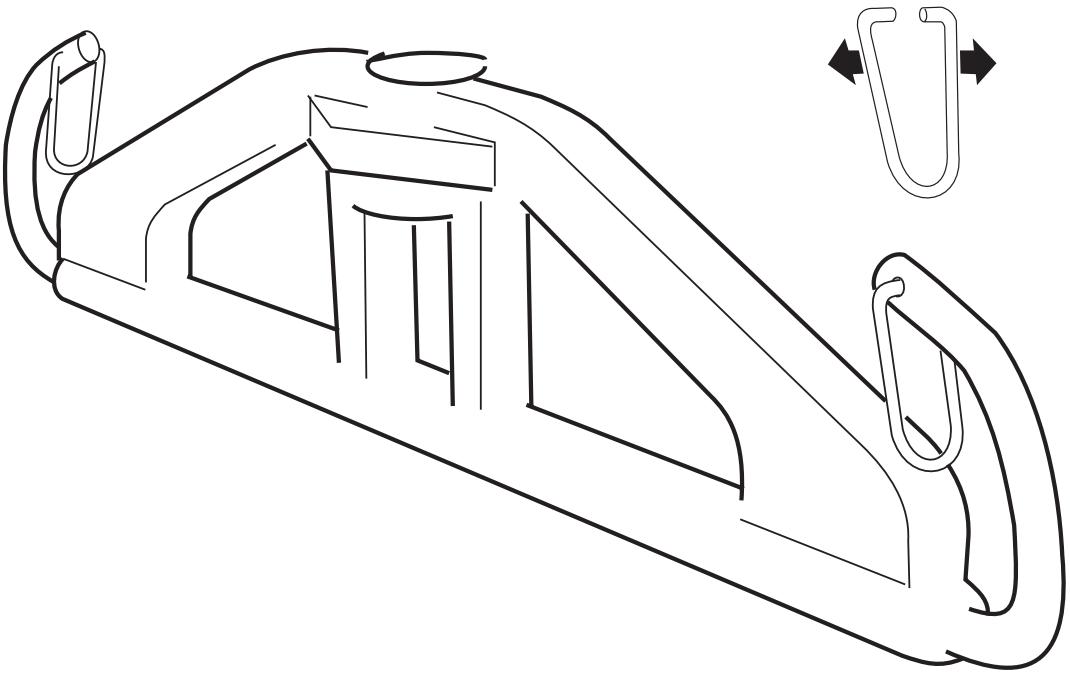
Assembly Instruction
Monteringsanvisning

Safety Latch
Urkrokningsskydd

Prod.no: 31190018

Doc. no: TI 31190018
2003-09-09

Tools required:



Liko

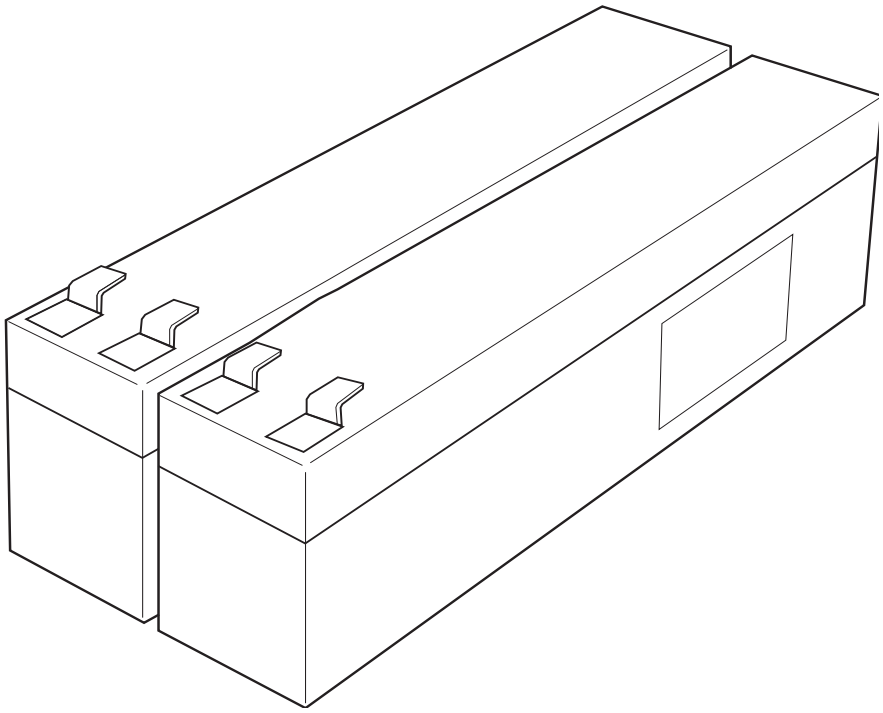
4.90

Spareparts Specification
Reservdelslista

Battery 2,6 Ah/12 V
Batteri 2,6 Ah/12 V

Prod.no: 31290007
2003-09-09

Serial no ..... Version ..... Release .....



All details according to drawing no. R 3001065-5

Details	Detail pos.	Detail no.	Unit
Battery 2,6 Ah 12 V	6	950000254	2

Liko

4.90.1

Assembly Instruction
Monteringsanvisning

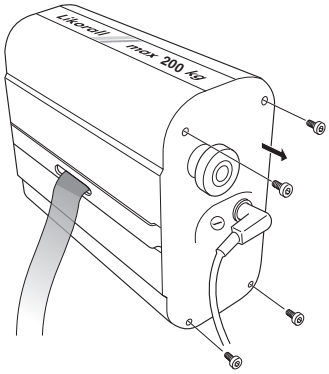
Battery 2,6 Ah/12 V
Batteri 2,6 Ah/12 V

Prod.no: 31290007

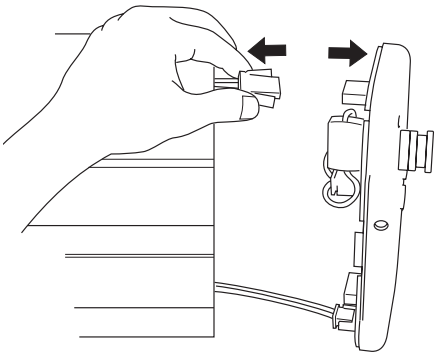
Doc. no: TI 31290007
2003-09-09

Tools required:

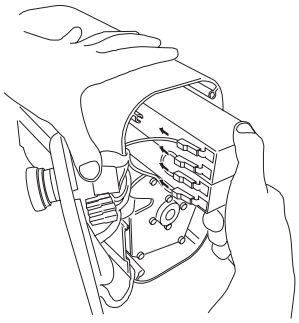
3 and 2,5 mm



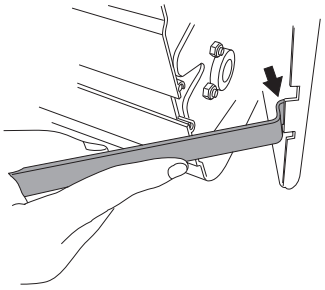
1. Remove the cover by unfasten the 4 screws.



2. Disconnect contact from battery



3. Pull out used batterys Mount the new batterys and the cable-shackle.



4. Put together the Likorall in reverse order. Mount the squeeze protection between the switch and the cover.

⚠ **After changing battery the lift must be tested with maximum load**
Check squeeze protection .

Liko

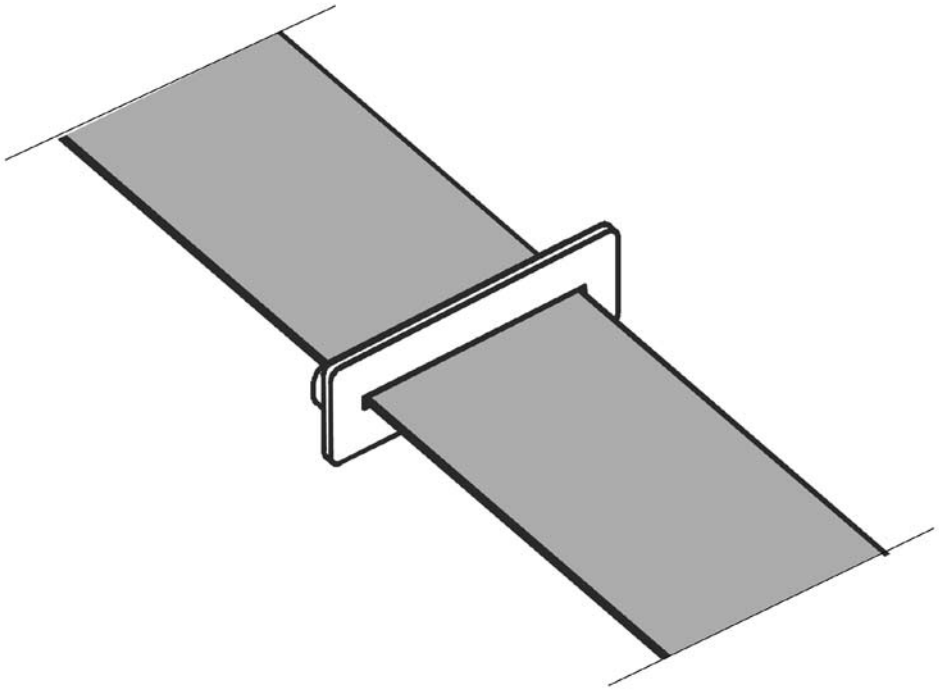
4.91

Spareparts Specification
Reservdelslista

Lift Strap Likorall
Lyftband Likorall

Prod.no: 31290011
2003-09-09

Serial no ..... Version ..... Release .....



All details according to drawing no. R 3001065-5

Details	Detail pos.	Detail no.	Unit
Lift strap LR24	9	901223042	1
Screw MCS M3*55		930000261	1
Nut M3 Nyloc		930000262	1
Strapguide	10	901931019	1

Liko

4.91.1

Assembly Instruction
Monteringsanvisning

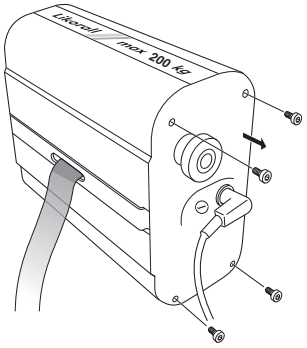
Lift Strap Likorall
Lyftband Likorall

Prod.no: 31290011

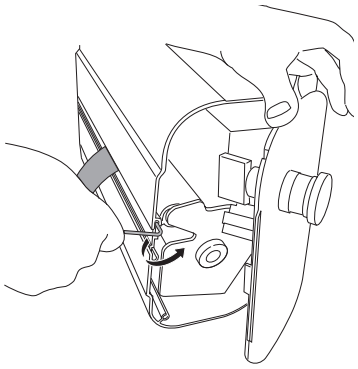
Doc. no: TI 31290011
2003-09-09

Tools required:

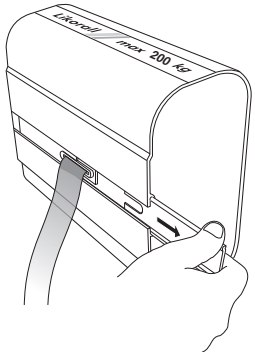
3 and 2,5 mm



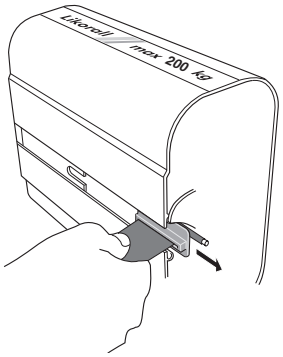
1. Remove the end cover and drive the liftstrap out to the maximum position.



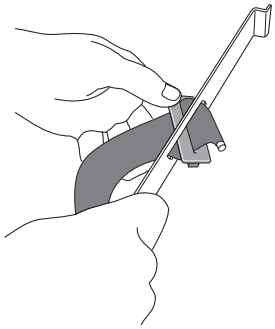
2. Remove the two locking screws from the locking rail.



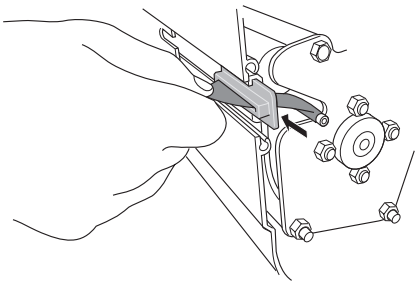
3. Pull the locking rail out .



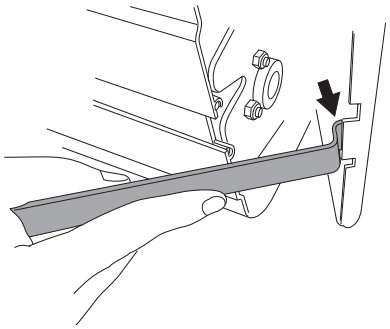
4. Drive the lift strap back a little so you can see that the drum is in line with the plate. Pull out the lift strap.



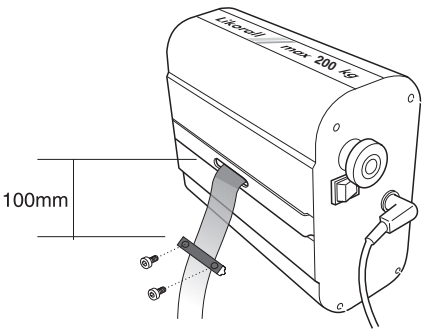
5. Mount the new lift strap through the squeeze protection.



6. Mount the lift strap



7. Mount the squeeze protection between the switch and the end cover.



8. Pull the strap in to the highest position. Feed out 10 cm. Mount the strapstop on the lift strap

⚠

After changing lift strap the lift must be tested with maximum load
Check squeeze protection .

Se page 4.77.1 Instructions for change emergency lowering device

Liko

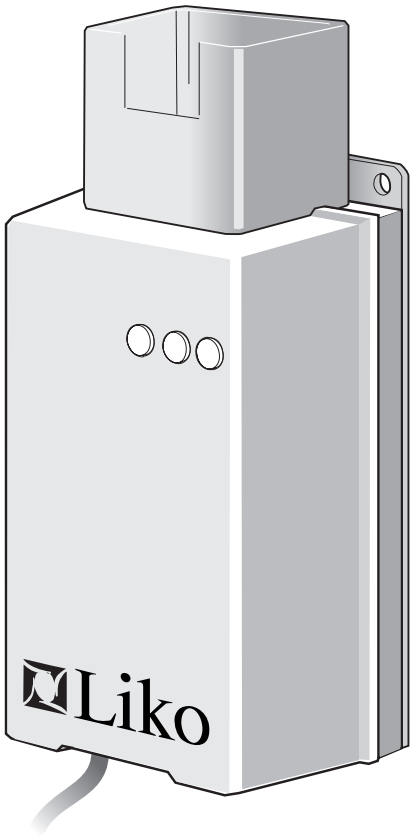
4.118

Spareparts Specification
Reservdelslista

Battery charger, EU
Laddare väggmonterad, EU

Prod.no: 3126101
2003-09-09

Serial no ..... Version *V2* ..... Release .....



All details according to drawing no.

Details	Detail pos.	Detail no.	Unit
Battery charger, EU		3126101	1
Charger Fittings LR		900001393	1

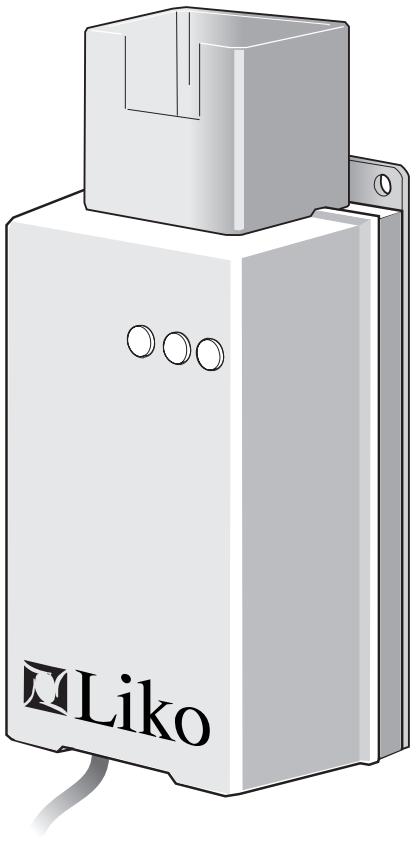
Liko

Spareparts Specification
Reservdelslista

Battery charger, UK
Laddare väggmonterad, UK

Prod.no: 3126102
2003-09-09

Serial no ..... Version *V2* ..... Release .....



All details according to drawing no.

Details	Detail pos.	Detail no.	Unit
Battery charger, UK		3126102	1
Charger Fittings LR		900001393	1

Liko

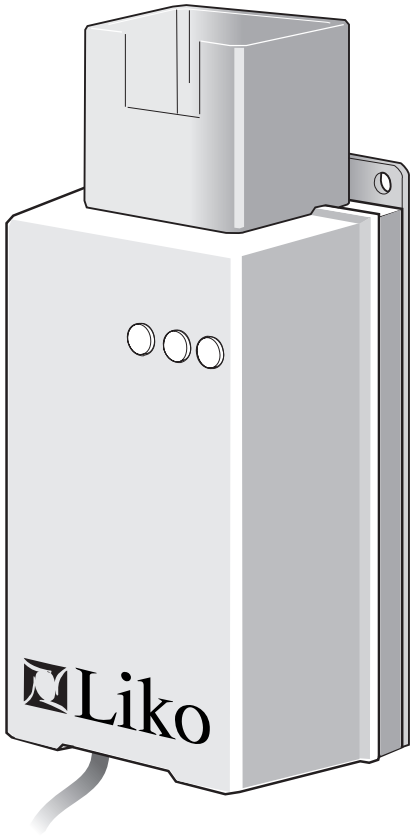
4.120

Spareparts Specification
Reservdelslista

Battery charger, US
Laddare väggmonterad, US

Prod.no: 3126103
2003-09-09

Serial no ..... Version *V2* ..... Release .....



All details according to drawing no.

Details	Detail pos.	Detail no.	Unit
Battery charger, US		3126103	1
Charger Fittings LR		900001393	1

Liko

4.118-120.1

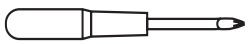
Assembly Instruction
Monteringsanvisning

Battery charger
Laddare väggmonterad

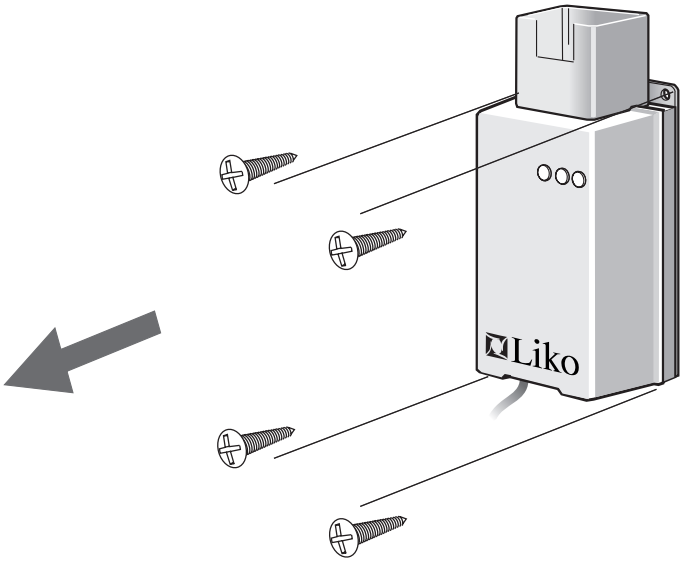
Prod.no: 3126101-3

Doc. no: TI 3126101-3
2003-09-09

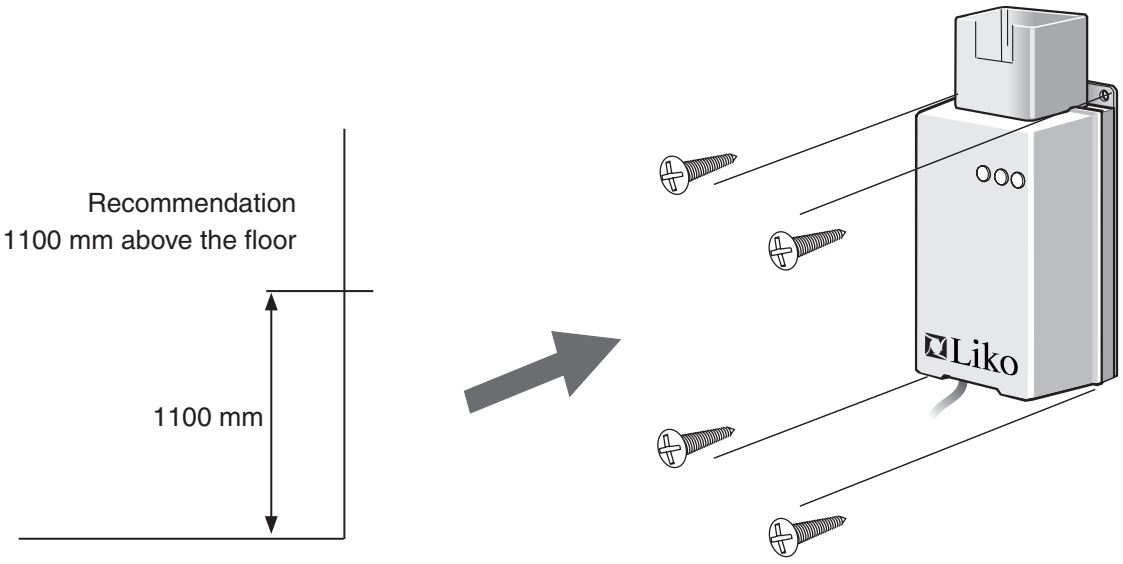
Tools required:



1. Old Charger



2. New Charger



Liko

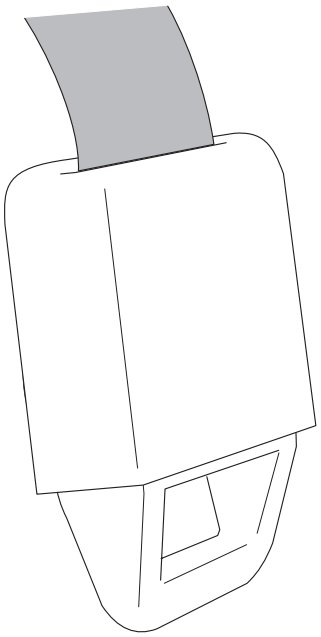
4.129

Spareparts Specification
Reservdelslista

Lift Strap Likorall R2R
Lyftband Likorall R2R

Prod.no: 31290028
2003-09-09

Serial no ..... Version *V2* ..... Release .....



All details according to drawing no. R 3931030-5

Details	Detail pos.	Detail no.	Unit
Lift strap R2R LR240	31	901509064	1
Strap guide		901931019	1
Strap joint for R2R		901135552	1
Cover		901035252	1
Locking pin 4x48		900000512	1

Liko

4.129.1

Assembly Instruction
Monteringsanvisning

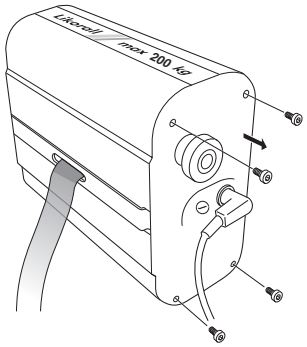
Lift Strap Likorall R2R
Lyftband Likorall R2R

Prod.no: 31290028

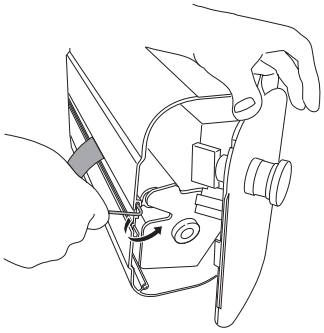
Doc. no: TI 31290028
2003-09-09

Tools required:

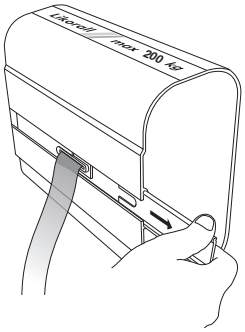
3 and 2,5 mm



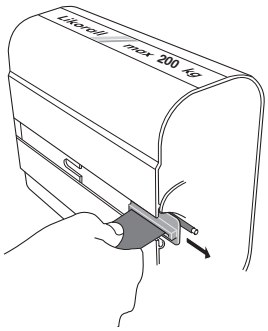
1. Remove the cover then drive the lift strap out to the maximum position.



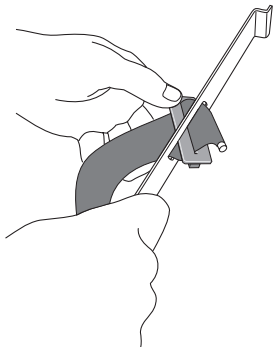
2. Remove the two locking screws from the locking rail.



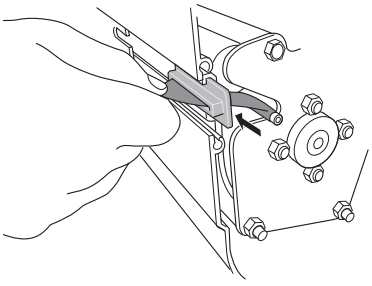
3. Pull the locking rail out.



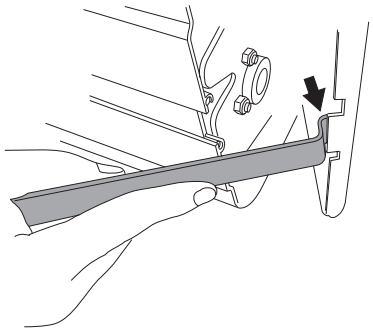
4. Drive the lift strap back a little so you can see that the drum is in line with the plate. Pull out the lift strap.



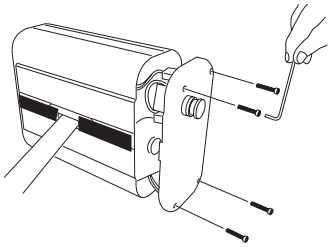
5. Mount the new lift strap through the squeeze protection.



6. Mount the lift strap



7. Mount the squeeze protection between the switch and the cover.



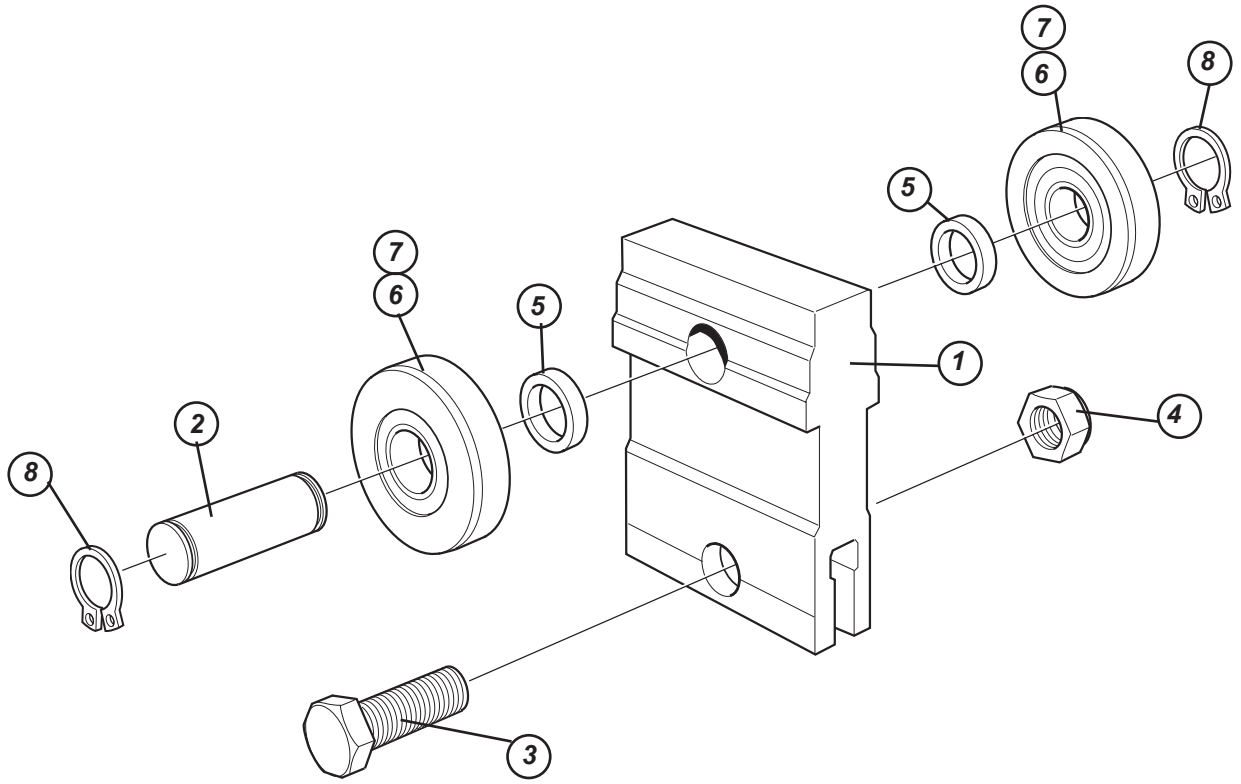
8. Put together the Likorall in reverse order.
! Check the squeeze protection before assembly the cover.
See 7TI 31290057

⚠ **After changing lift strap the lift must be tested with maximum load. Check squeeze protection.**

Carriage Part without Brake
Åkvagnsdel utan broms

Prod.no: 3126017
2003-09-09

Serial no ..... Version ..... Release .....



All details according to drawing no.

Details	Detail pos.	Detail no.	Unit
Carriage DeJong	1	901489302	1
Axle 10*42	2	9012164D1	1
Screw M6S M8*25	3	930000279	1
M8 Nyloc	4	930000091	1

Details	Detail pos.	Detail no.	Unit
Washer 10/16*2 PVC	5	930000086	6
Ball bearing 6000-2Z	6	920000098	2
Wheel D=34mm	7	91181408T	2
Seeger-lock device	8	930000250	2

Liko

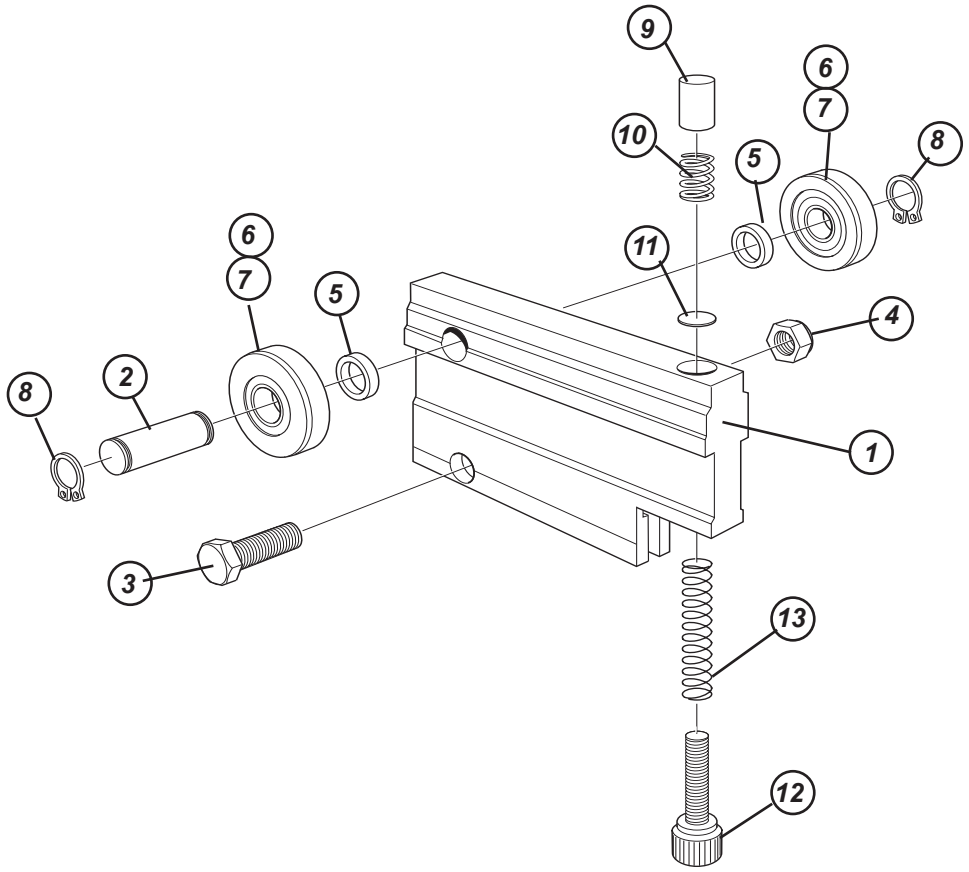
4.134

Spareparts Specification
Reservdelslista

Carriage Part with Brake
Åkvagn med broms

Prod.no: 3126013
2003-09-09

Serial no ..... Version ..... Release .....



All details according to drawing no.

Details	Detail pos.	Detail no.	Unit
Carrige Likorall	1	901931026	1
Axle 10*42	2	9012164D1	1
Screw M6S M8*25	3	930000279	1
M8 Nyloc	4	930000091	1
Wascher 10/16*2 PVC	5	930000086	2
Ball bearing	6	920000098	2
Wheel	7	91181408T	2

Details	Detail pos.	Detail no.	Unit
Seeger-lock device	8	930000250	2
Glidechock D=10 L=19mm	9	900000280	1
Spring 1,5*9,5*20	10	930000281	1
Washer 10*1	11	930000282	1
Screw, PS1412 M6*20 S	12	930000283	1
Spring 0.5x6x20	13	900000014	1

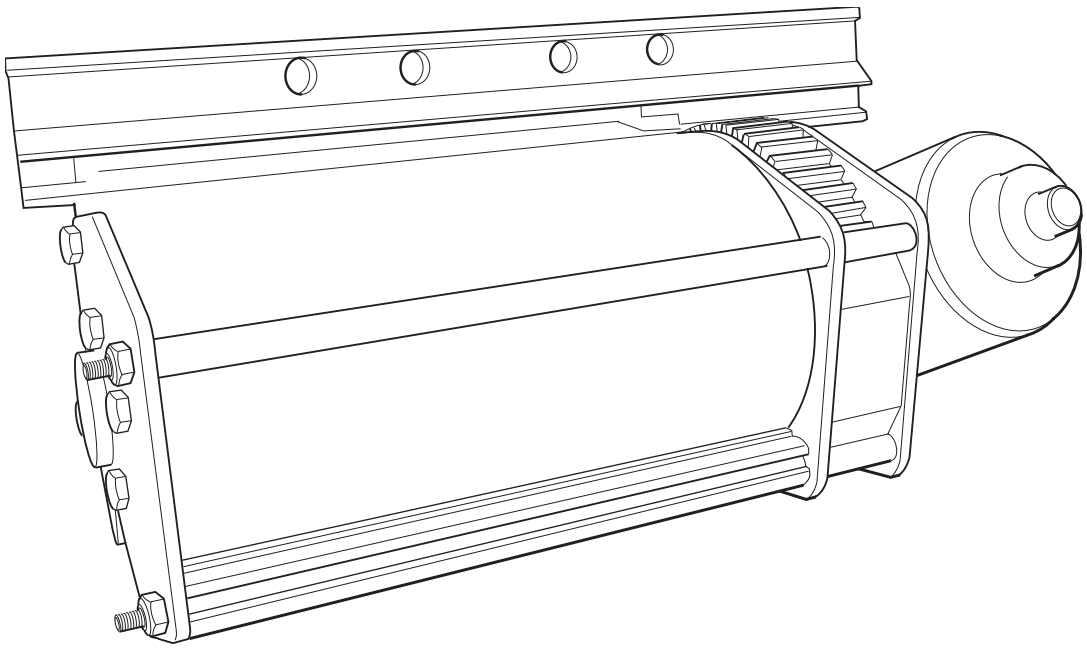
Liko

Spareparts Specification
Reservdelslista

Actuator Restoration set LR 242
Motorpaket LR 242

Prod.no: 31290054
2003-09-09

Serial no ..... Version *V2* ..... Release .....



All details according to drawing no.3001065-5

Details	Detail pos.	Detail no.	Unit
Actuator 242		900001302	1

Liko

4.151.1

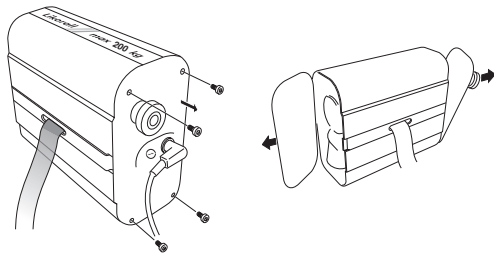
Assembly Instruction
Monteringsanvisning

Actuator Restoration set LR 242
Motorpaket LR 242

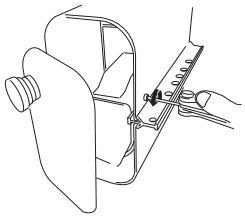
Prod.no: 31290054

Doc. no: TI 31290054
2003-09-09

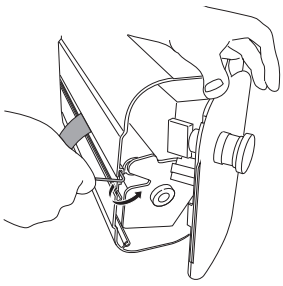
Tools required:
3 och 2,5 mm



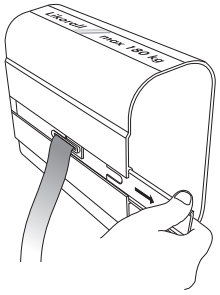
1. Remove the scews from and cover.
Drive the liftstrap out to the maximum position.



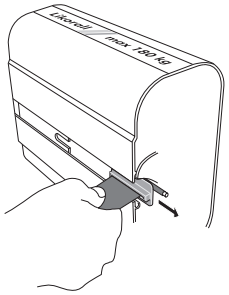
2. Remove the locking screw from the cover.



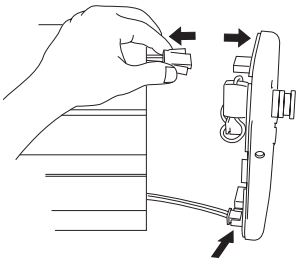
3. Remove the two locking screws from the locking rail.



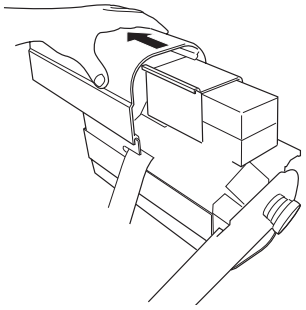
4. Pull the locking rail out.



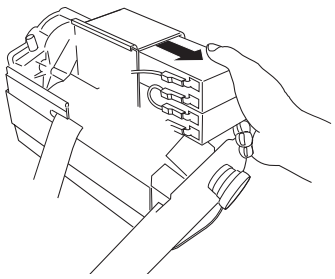
5. Drive the liftstrap back a little so you can see that the drum is in line with the plate. Pull the liftstrap out.



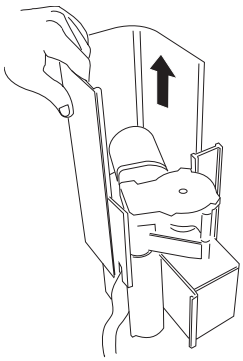
6. Disconnect both contacts. Remove and covers.
.



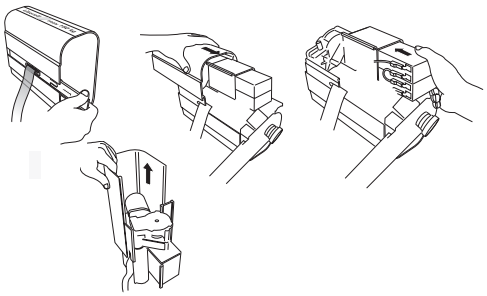
7. Remove the cover from the actuator.



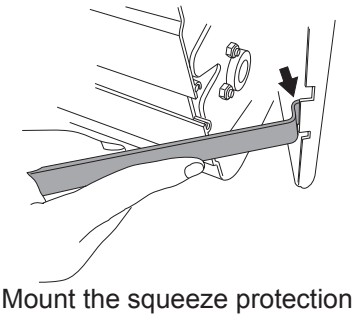
8. Remove the battery.



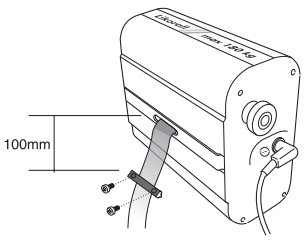
9. Remove the locking screw. Pull out the cover and clip from the actuator.



10. Put together the Likorall in reverse order



11. Mount the squeeze protection between the switch and the cover.



12. Pull the strap to the highest position. Feed out 10 cm. Mount the strapstop on the liftstrap

⚠ **After changing actuator the lift must be tested with maximum load**
Check squeeze protection .

Liko

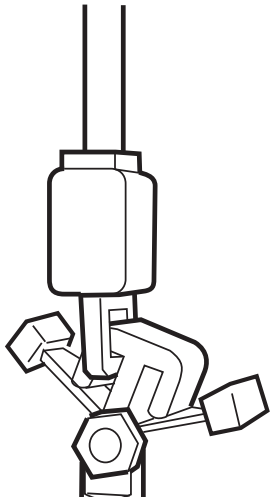
4.186

Spareparts Specification
Reservdelslista

Hook R2R
Krok R2R

Prod.no: 31290056
2003-09-09

Serial no ..... Version V1 ..... Release .....



All details according to drawing no.

Details	Detail pos.	Detail no.	Unit
Quick spring R2R		901509043	2
Spring plastic cover R2R		901509072	2
Dubbelhook R2R alu.		901950903	1
Screw K6S M10x40		930000005	1
Locknut M10 Nyloc		930000010	1
Screw RX M3x10		930000035	2
Locknut M3 Nyloc		930000262	2

Liko

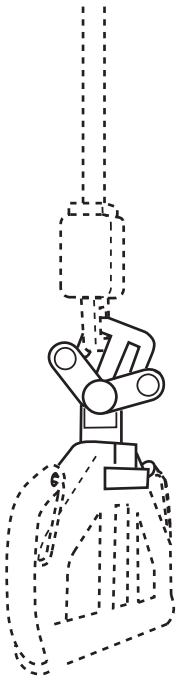
4.186

Spareparts Specification
Reservdelslista

Hook R2R
Krok R2R

Prod.no: 31290056
2003-09-09

Serial no ..... Version V2 ..... Release .....



All details according to drawing no.

Details	Detail pos.	Detail no.	Unit
Quick spring R2R		901001061	1
Spring plastic cover 14		901035391	2
Spring plastic cover 16		901035392	2
Dubbelhook R2R alu.		901950903	1
Tub		930000301	1
Screw RX M4x22		930000105	2
Locking nut M4 Nyloc		930000084	2

Liko

4.186.1

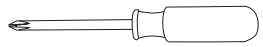
Assembly Instruction
Monteringsanvisning

Hook R2R
Krok R2R

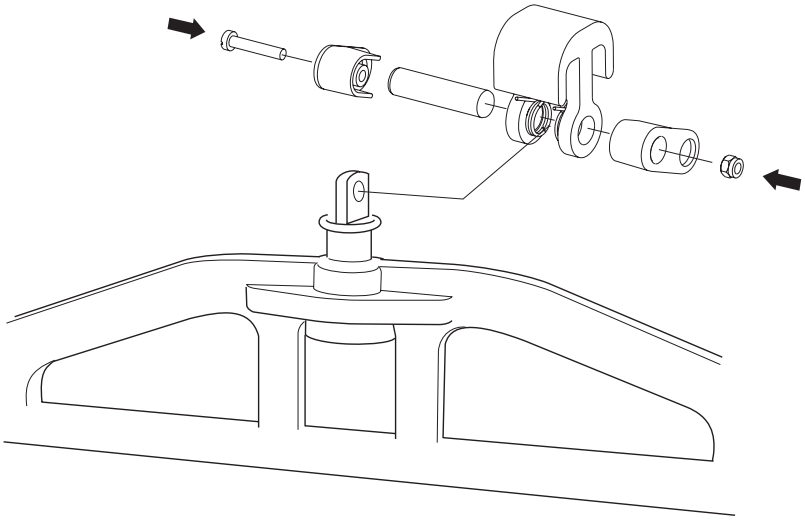
Prod.no: 31290056

Doc. no: TI 31290056
2003-09-09

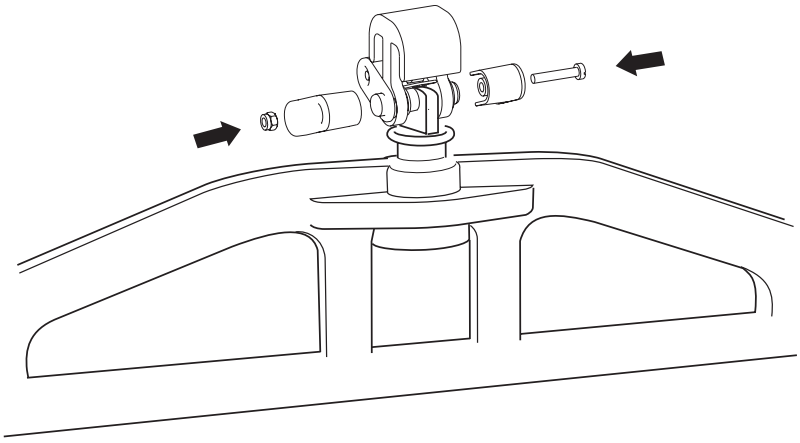
Tools required:



1.



2.



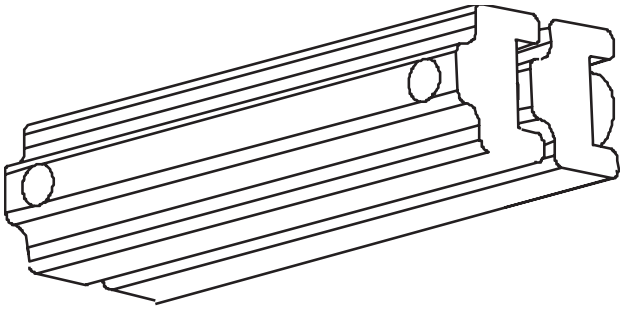
Liko

Spareparts Specification
Reservdelslista

Strap Stop
Bandstopp kmpl.

Prod.no: 31290057
2003-09-09

Serial no ..... Version ..... Release .....



All details according to drawing no. R 3001065-5

Details	Detail pos.	Detail no.	Unit
Bandstopp 1 LR24	3	901810401	1
Bandstopp 2 LR24	3	901810402	1
Skruv MC6S M5x16	3	930000192	2

Liko

4.203.1

Assembly Instruction
Monteringsanvisning

Strap Stop
Bandstopp kmpl.

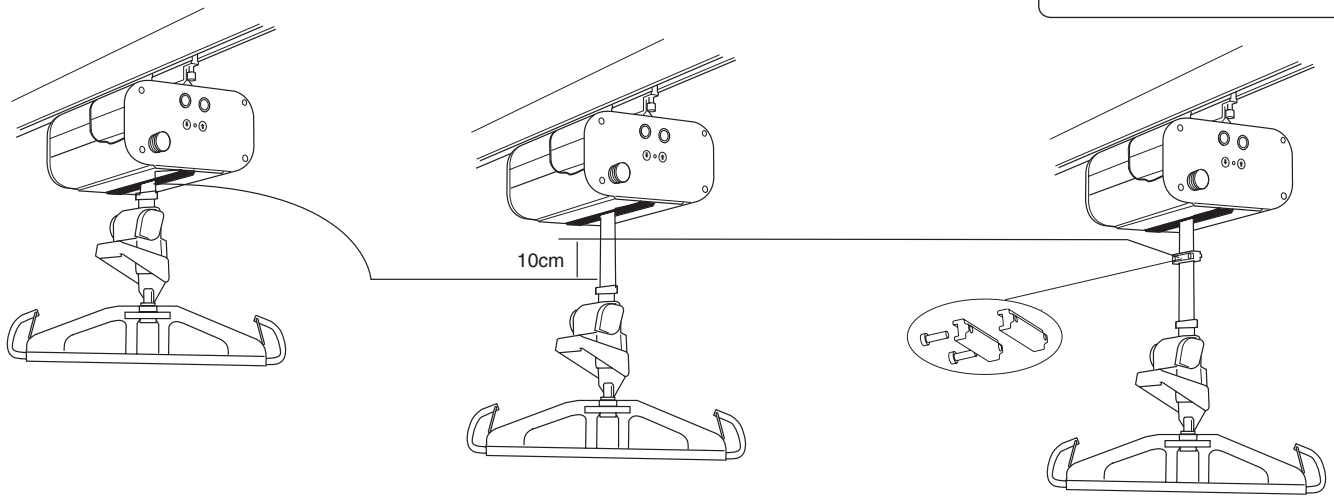
Prod.no: 31290057

Doc. no: TI 31290057
2003-09-09

Likorall 242 ES,242 S

Tools required:

4 mm

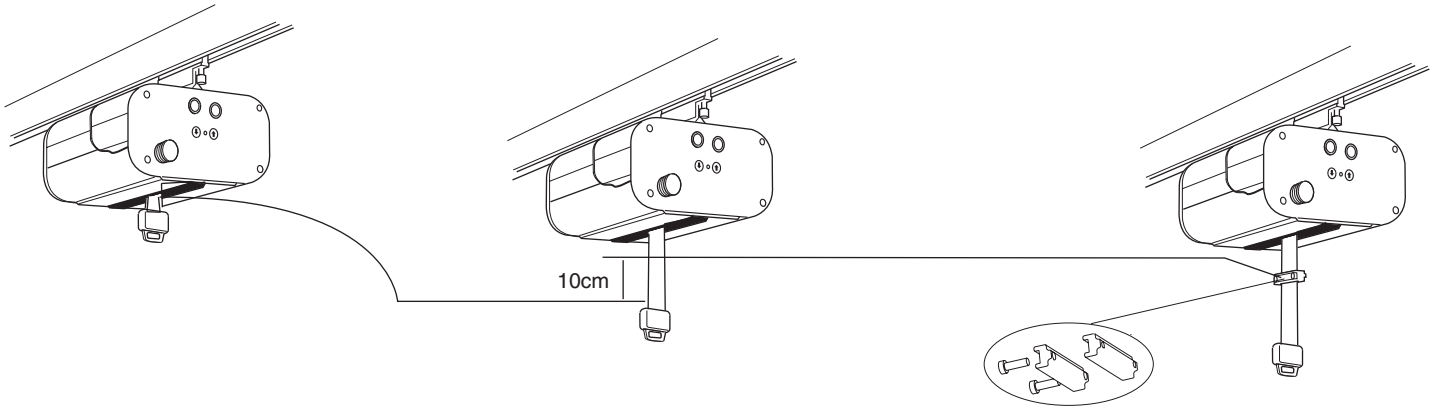


1.Drive the strap to the highest position.

2. Mount the strapstop
10 cm above the stop mark.

Likorall 242 ES R2R,242 S R2R

Note!
Use only the strap stop on old lift straps. More then 210cm



1.Drive the strap to the highest position.

2. Feed out the liftstrap10 cm.

3. Mount the strapstop
10 cm above the stop mark.

⚠ After changing strapstop the lift must be tested with maximum load.
Check squeeze protection .

Liko

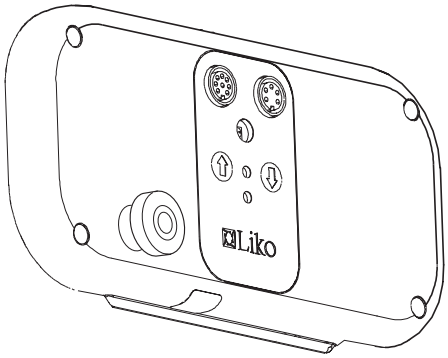
4.204

Spareparts Specification
Reservdelslista

Electronic Card with Cover ES
Gavel med kretskort 242 ES

Prod.no: 31290058
2003-09-09

Serial no ..... Version ..... Release .....



All details according to drawing no. R 3001065-5

Details	Detail pos.	Detail no.	Unit
Electronic card w cover ES	17	901001063	1

Liko

4.204.1

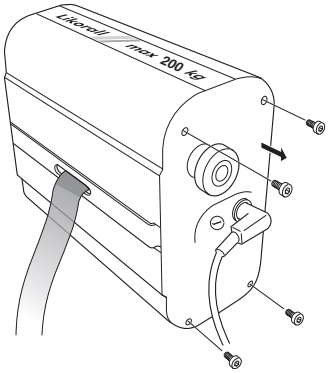
Assembly Instruction
Monteringsanvisning

Electronic Card with Cover ES
Gavel med kretskort 242 ES

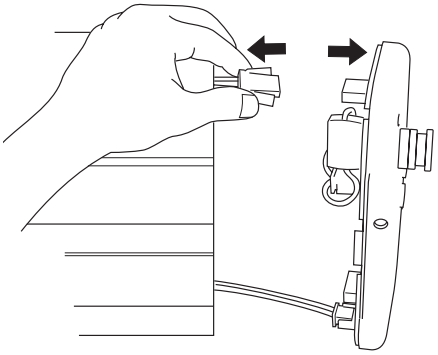
Prod.no: 31290058

Doc. no: TI 31290058
2003-09-09

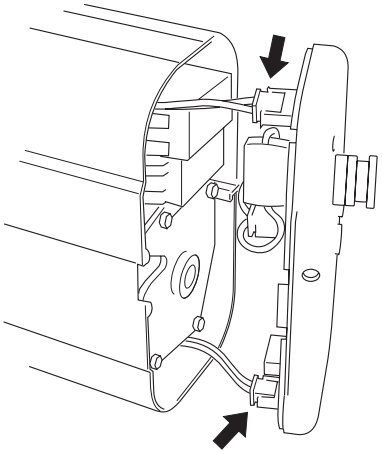
Tools required:
3 and 2,5 mm



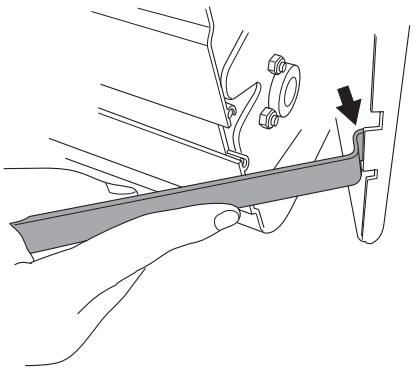
1. Remove the cover by unfasten the 4 screws.



2. Disconnect both contacts.



3. Mount new card and Connect both cotacts



Note!
Mount the squeeze protection between the switch and the cover.

⚠ **After changing electronic card the lift must be tested with maximum load.**
Check squeeze protection .

Liko

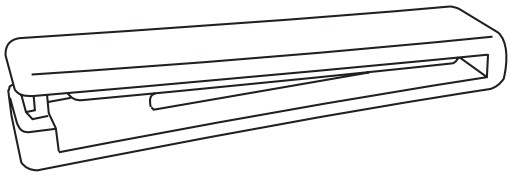
4.210

Spareparts Specification
Reservdelslista

Movable Strap Stop
Bandmarkering

Prod.no: 31290059
2003-09-09

Serial no ..... Version ..... Release .....



All details according to drawing no. R 3001065-5

Details	Detail pos.	Detail no.	Unit
Movable Strap stop compl		901000607	10

Liko

4.210.1

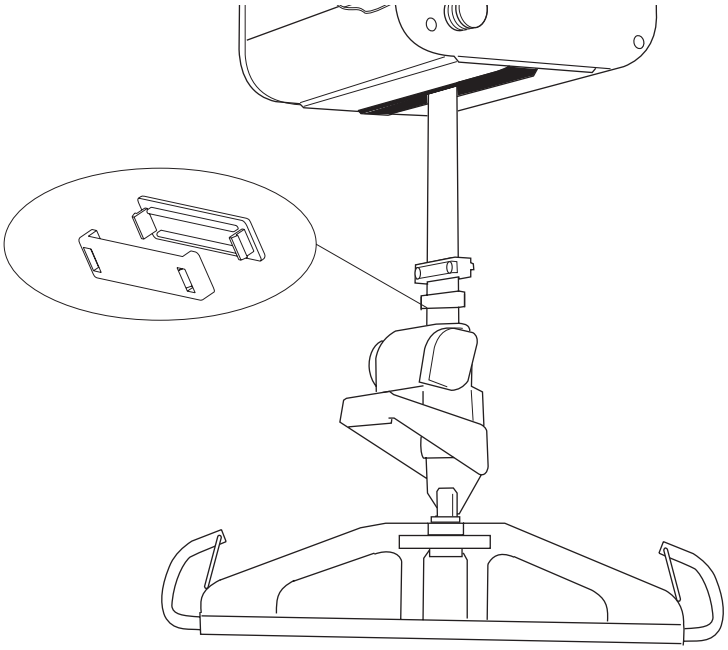
Assembly Instruction
Monteringsanvisning

Movable Strap Stop
Bandmarkering

Prod.no: 31290059

Doc. no: TI 31290059
2003-09-09

Tools required:



Liko

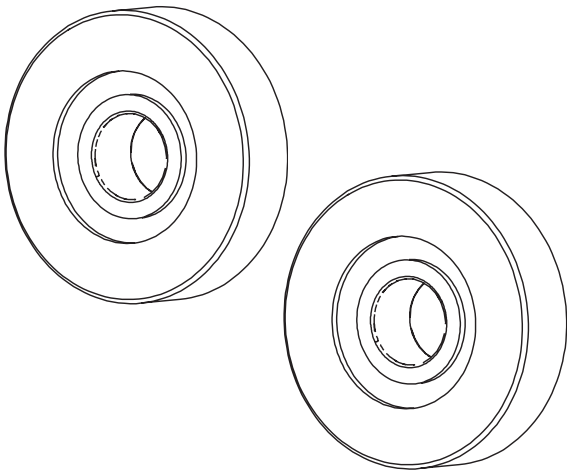
4.213

Spareparts Specification
Reservdelslista

Plastic Wheel with Bearing
Hjulbana med lager

Prod.no: 31290060
2003-09-09

Serial no ..... Version ..... Release .....



All details according to drawing no.

Details	Detail pos.	Detail no.	Unit
Wheel With Bearing	7	91181408T	2

Liko

4.213.1

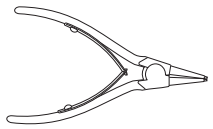
Assembly Instruction
Monteringsanvisning

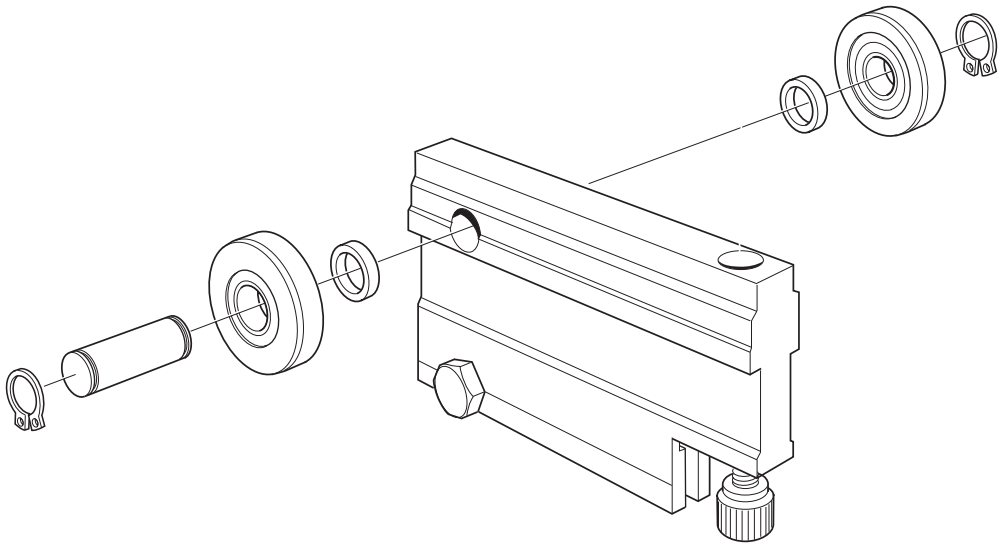
Plastic Wheel with Bearing
Hjulbana med lager

Prod.no: 31290060

Doc. no: TI 31290060
2003-09-09

Tools required:



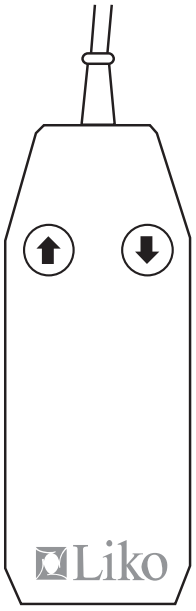


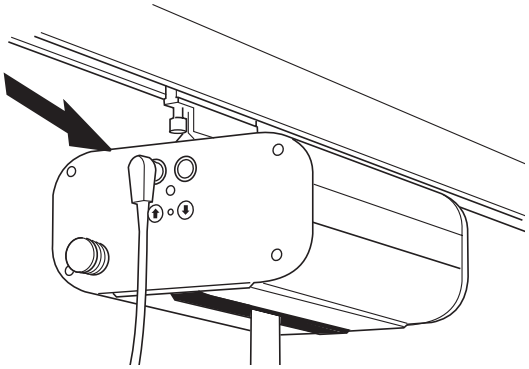
Spareparts Specification
Reservdelslista

Hand Control LR 242 ES, 2-button
Handkontroll LR 242 ES, 2-knapp

Prod.no: 3126034
2003-09-09

Serial no ..... Version ..... Release .....





All details according to drawing no.

Details	Detail pos.	Detail no.	Unit
Tubesolder	1	900000331	2
Cable tube	1	900000335	1
Cover 2-button	3	900001025	1
Screw PT WN 1412 3,0x16	4	930000334	2
Electronic card	5	950000064	1
Tangentb handk 2-knp LR	6	950000095	1

Liko

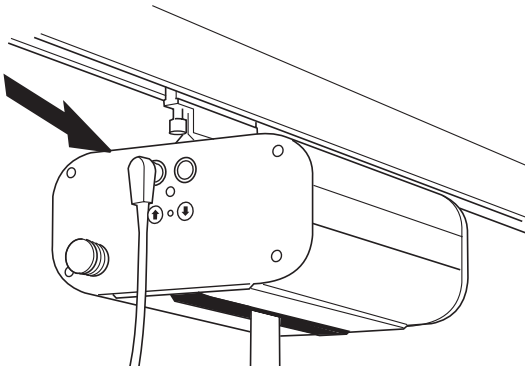
4.215

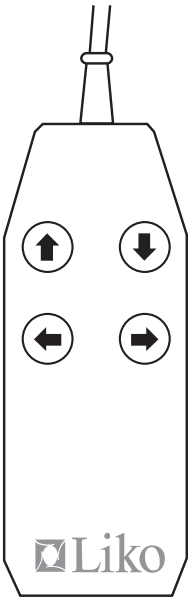
Spareparts Specification
Reservdelslista

Hand Control LR 242 ES, 4-button
Handkontroll LR 242 ES, 4-knapp

Prod.no: 3126036
2003-09-09

Serial no ..... Version ..... Release .....





All details according to drawing no.

Details	Detail pos.	Detail no.	Unit
Tubesolder	1	900000331	2
Cable tube	1	900000335	1
Cover 2-button	3	900001025	1
Screw PT WN 1412 3,0x16	4	930000334	2
Electronic card	5	950000064	1
Tangentb handk 4-knp LR	6	950000096	1

Liko

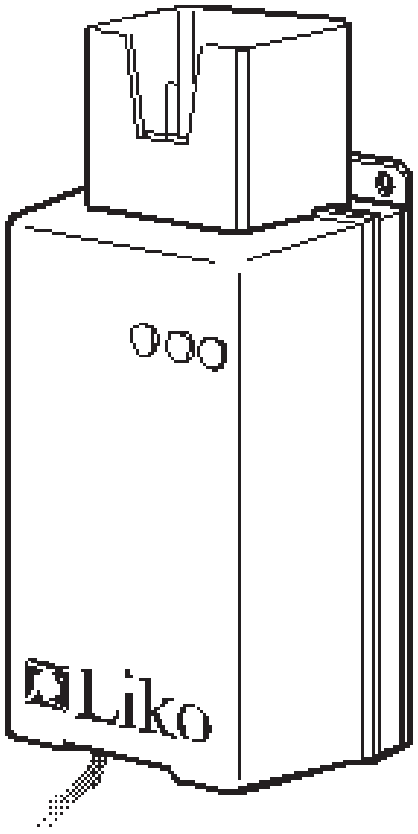
4.227

Spareparts Specification
Reservdelslista

Battery charger, Au/NZ
Laddare väggmonterad, Au/NZ

Prod.no: 3126104
2003-09-09

Serial no ..... Version ..... Release .....



All details according to drawing no.

Details	Detail pos.	Detail no.	Unit
Battery charger, AU/NZ		3126104	1
Charger Fittings LR		900001393	1

Liko

4.227.1

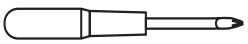
Assembly Instruction
Monteringsanvisning

Battery charger LR, Au/NZ
Laddare väggmonterad, Au/NZ

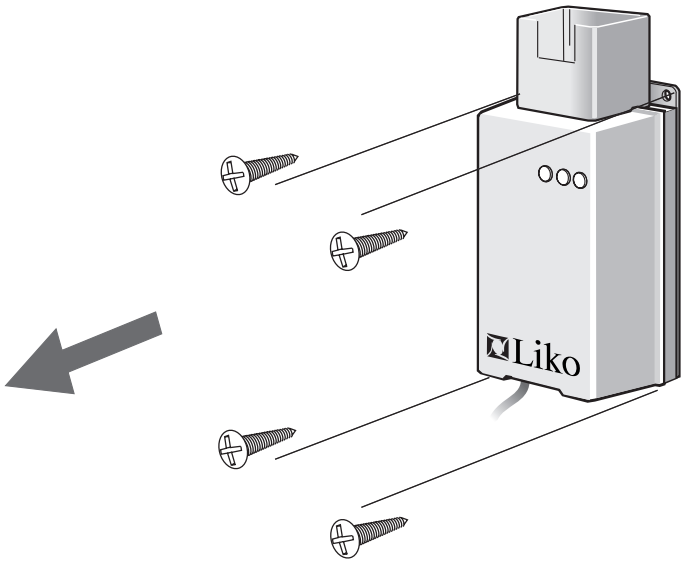
Prod.no: 3126104

Doc. no: TI 3126104
2003-09-09

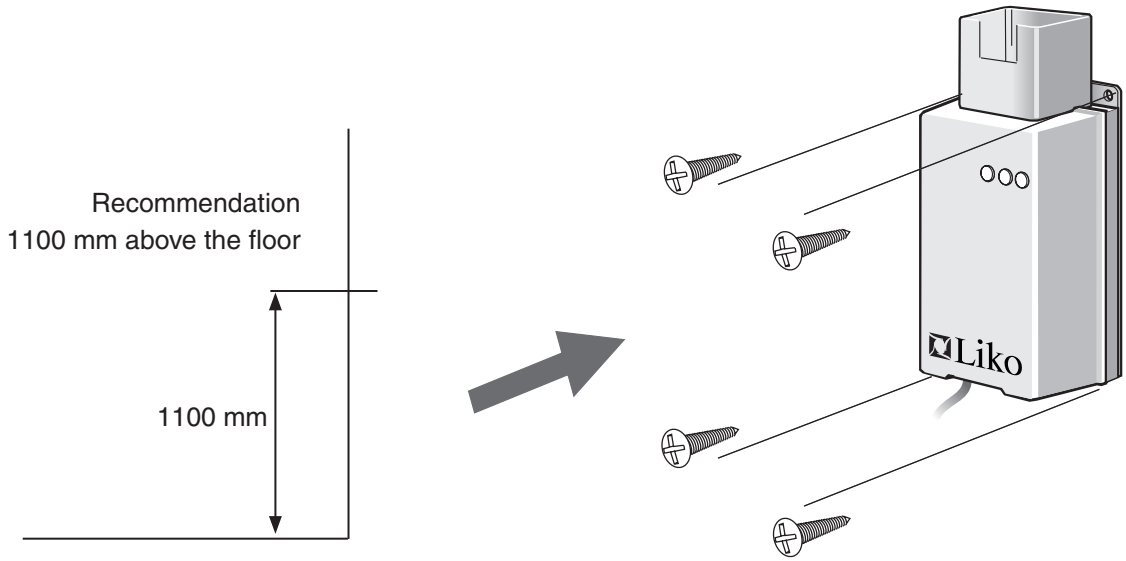
Tools required:



1. Old Charger



2. New Charger



Liko

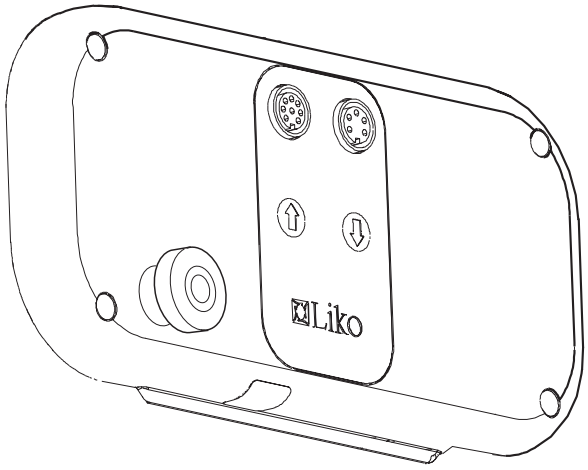
4.241

Spareparts Specification
Reservdelslista

Electronic Card with Cover S
Gavel med kretskort 242 S

Prod.no: 31290062
2003-09-09

Serial no ..... Version ..... Release .....



All details according to drawing no. R 3001065-5

Details	Detail pos.	Detail no.	Unit
Electronic card w cover S	17	901021001	1

Liko

4.241.1

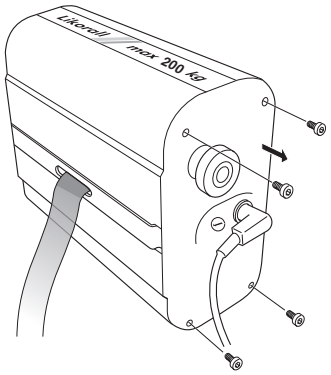
Assembly Instruction
Monteringsanvisning

Electronic Card with Cover S
Gavel med kretskort 242 S

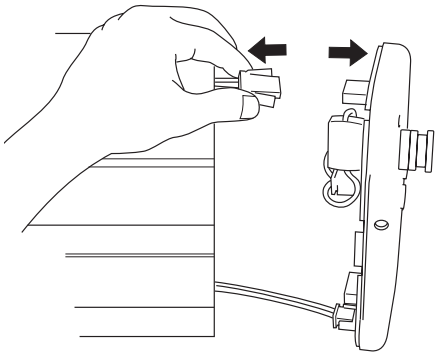
Prod.no: 31290062

Doc. no: TI 31290062
2003-09-09

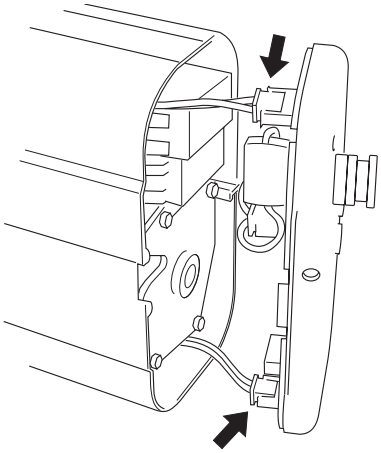
Tools required:
3 and 2,5 mm



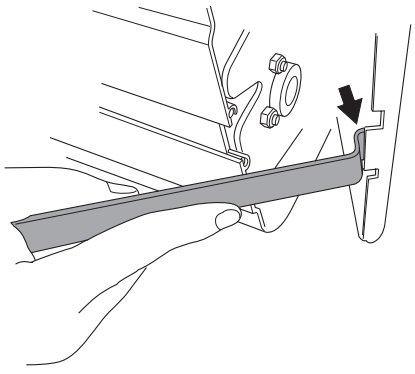
1. Remove the cover by unfasten the 4 screws.



2. Disconnect both contacts



3. Mount new card and Connect both cotacts



Note!
Mount the squeeze protection between the switch and the cover.

⚠ **After changing electronic card the lift must be tested with maximum load.**
Check squeeze protection .

Liko

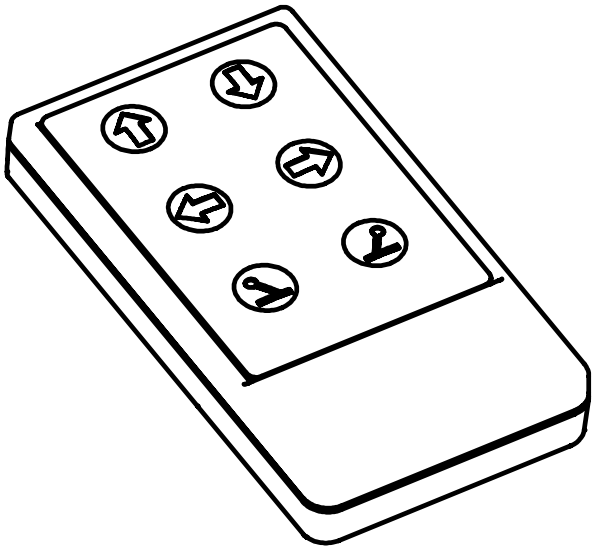
4.242

Spareparts Specification
Reservdelslista

Hand Control Remote 242 ES
Fjärrkontroll 242 ES

Prod.no: 3126060
2003-09-09

Serial no ..... Version ..... Release .....



All details according to drawing no.

Details	Detail pos.	Detail no.	Unit
Hand Control Remote 242 ES	1	3126060	1

Liko

4.242.1

Assembly Instruction
Monteringsanvisning

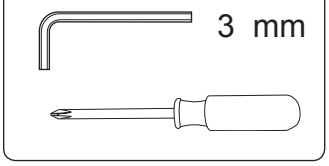
Hand Control Remote 242 ES
Fjärrkontroll 242 ES

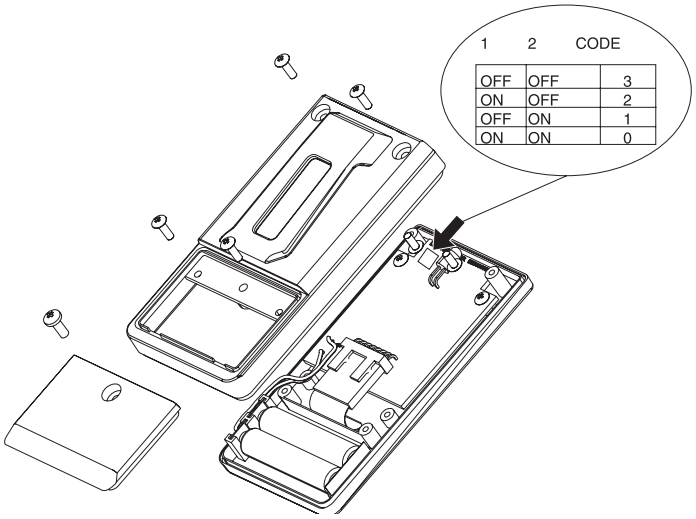
Prod.no: 3126060

Doc. no: TI 3126060
2003-09-09

Re-coding of Hand Control Remote 242 ES, 3126060

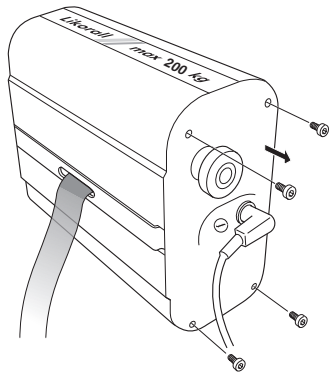
Tools required:

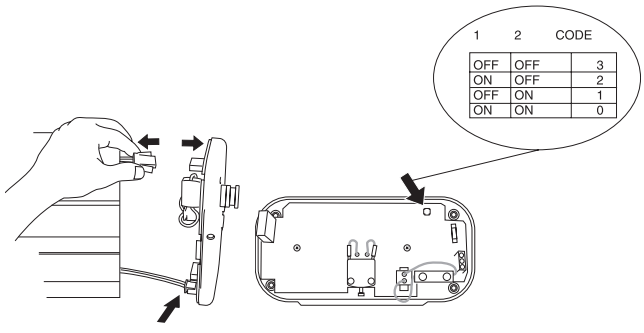


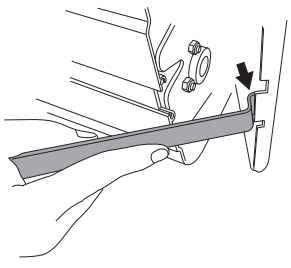


1. Remove battery flap by unfasten the lower screw.
2. Remove the bottom-half of the Hand Control by unfasten the screws behind the battery flap and also the two att the top.
3. Change code by moving the “dip-switch” to require code, use the table.
4. Put together the Hand Control in reverse order.
5. Check the Hand Control remote towards the Likorall 242ES

Re-cording of Likorall 242 ES







1. Remove the cover by unfasten the four screws.

2. Disconnect both contacts and change code by moving the ”dip-switches” to require code, use the table

3. Put together the Likorall in reverse order and check the Likorall towards the Hand Control.

⚠ **After changing code the lift must be tested with maximum load. Check squeeze protection .**

Liko

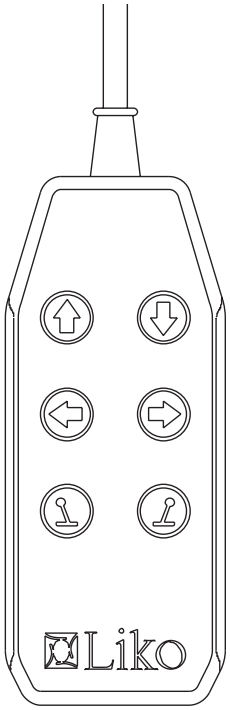
4.249

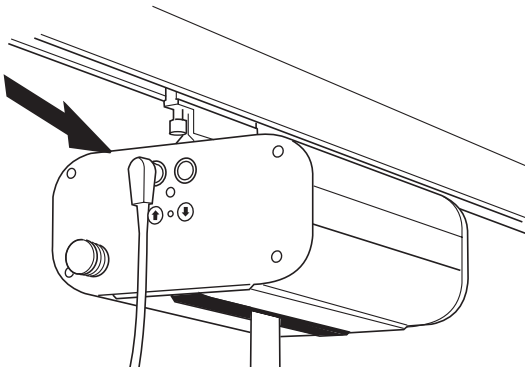
Spareparts Specification
Reservdelslista

Hand Control LR 242 ES, 6-button
Handkontroll LR 242 ES, 6-knapp

Prod.no: 3126038
2003-09-09

Serial no ..... Version ..... Release .....





All details according to drawing no.

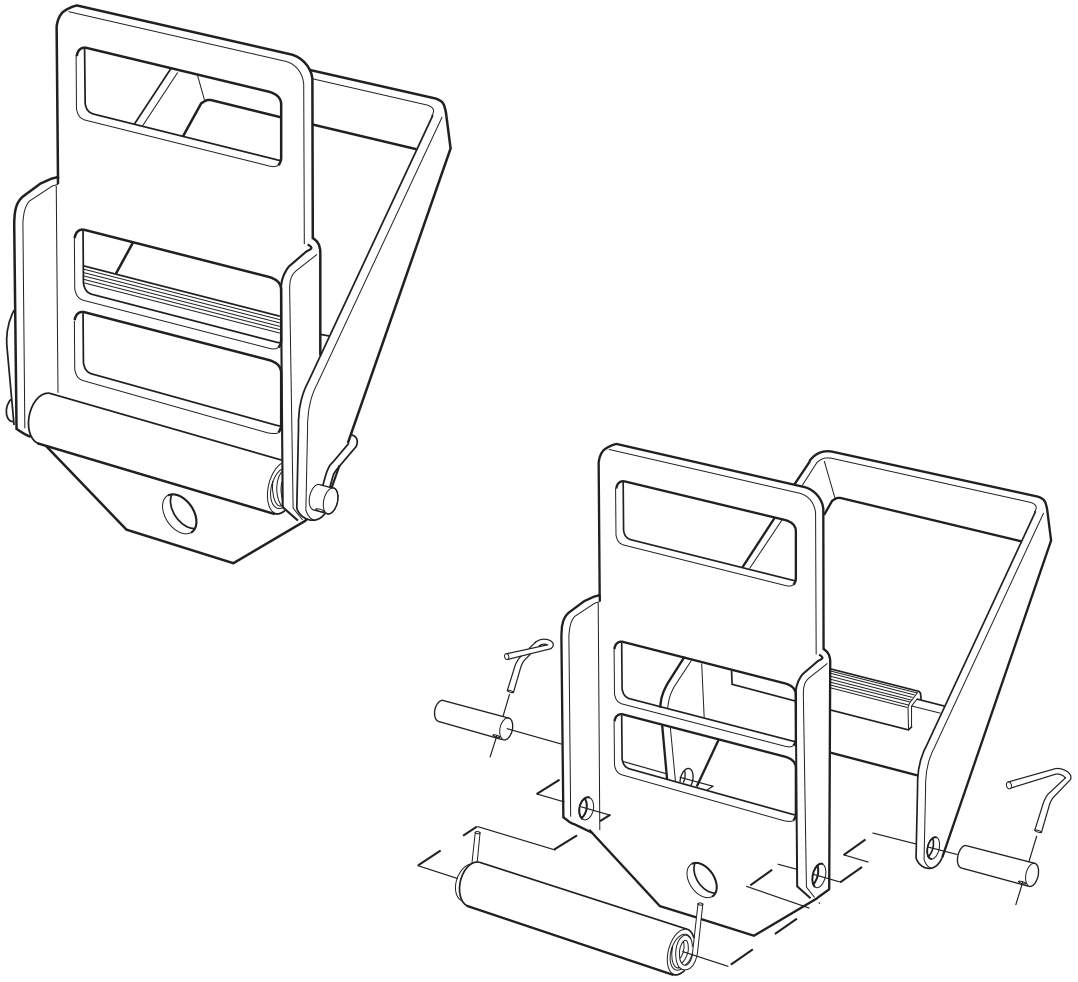
Details	Detail pos.	Detail no.	Unit
Tubesolder	1	900000331	2
Cable tube	1	900000335	1
Cover 2-button	3	900001025	1
Screw PT WN 1412 3,0x16	4	930000334	6
Electronic card	5	950000064	1
Tangentb handk 6-knp LR	6	950000070	1

Spareparts Specification
Reservdelslista

Body/Handle set for Emergency Lowering Device (Stainless steel)
Stomme/Handtag ML rostfri

Prod.no: 31190021
2003-10-03

Serial no ..... Version ..... Release .....



All details according to drawing no. R 3961204

Details	Detail pos.	Detail no.	Unit
Friction Profile	15	900001485	1
Tube 10/12 L=60mm	5	930000108	1
Nut M6M M5	8	930000230	1
Pin D=6 L=30	13	931891206	2
Torsion spring l/r	12	900000109H	1

Details	Detail pos.	Detail no.	Unit
Torsion spring l/r	12	900000109V	1
Axle stop right	14	901901207H	1
Axle stop left	14	901901207V	1
Baseplate	11	90191201C	1
Baseplate 2	16	90191201D2	1

Liko

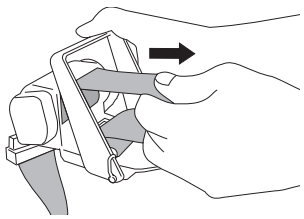
4.252.1

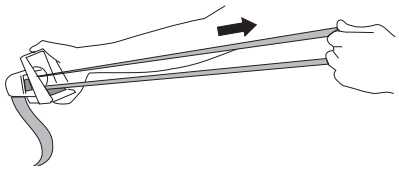
Assembly Instruction
Monteringsanvisning

Body/Handle set for Emergency Lowering Device (Stainless steel)
Stomme/Handtag ML rostfri

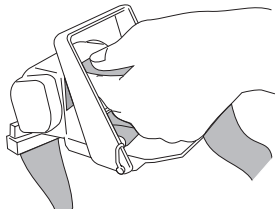
Prod.no: 31190021
2003-10-03

Tools required:

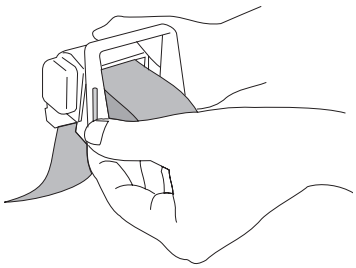




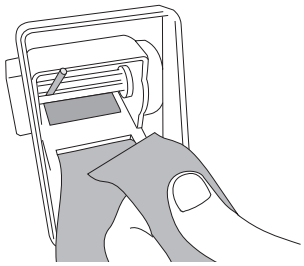
1. Pull the strap all the way out.



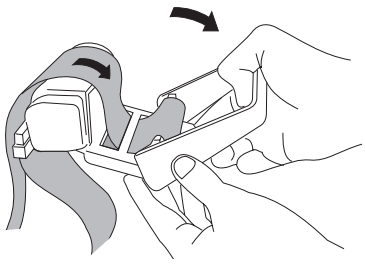
2. Hold the springloaded wheel and release the strap by removing the pin.



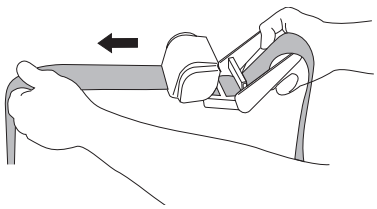
3. Remove the pin. △ Do not let go of the springloaded wheel, since the tension will release.



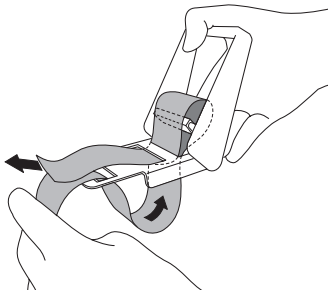
4. Use the pin to lock the axle where the strap was mounted.



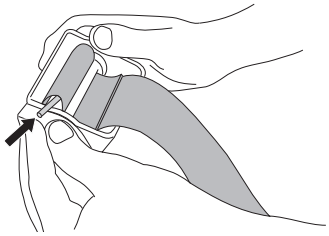
5. Push the emergency lowering handle down and pull the strap away.



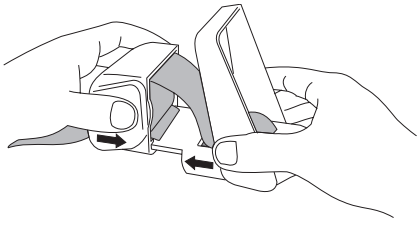
6. Pull the rest of the strap out and remove the plastic housing.



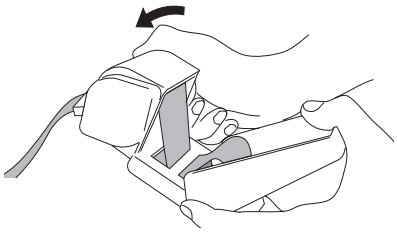
7. Mount the new strap through the plastic housing with the red mark towards the plastic housing and then as shown above.



8. Mount the strap through the slot in the axle and the same way back. **Note!** The axle has two different sides. Place the pin as shown to lock the strap. △ Do not let go of the springloaded wheel, since the tension will release.



9. Push the plastic housing on to the strap joint.



10. Roll up the strap until the red mark reaches the plastic housing.

⚠ **After changing Body/Handle the lift must be tested with maximum load**

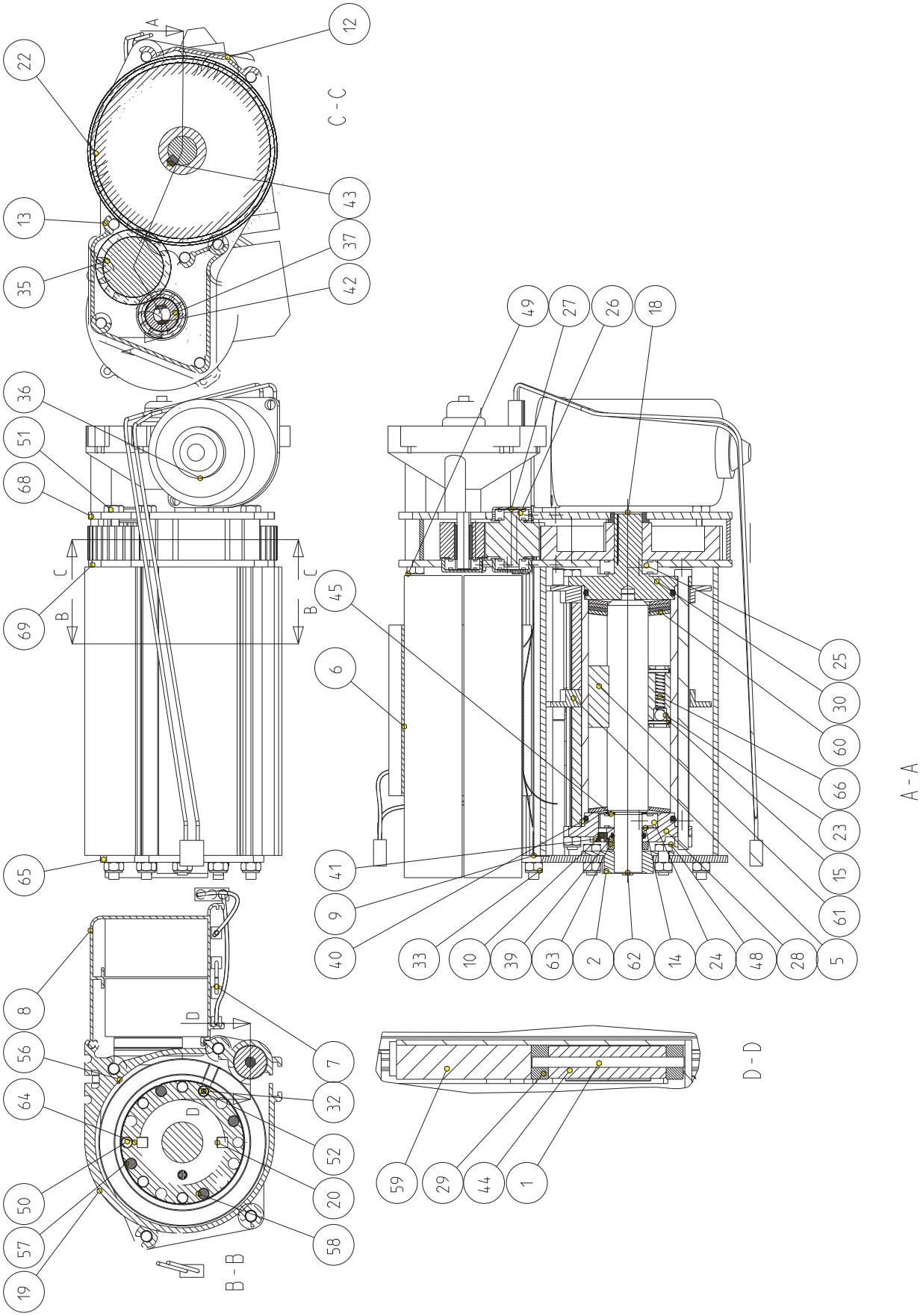
Troubleshooting
Likorall 242ES/242ES R2R, 242S/242S R2R

The lift doesn't work.	1. Check that the emergency stop button is not pressed in. 2. Charge the battery. 3. Check that the hand control is firmly connected. 4. If the lift still does not work correctly, contact Liko.
A repeated signal can be heard from the lift.	1. Charge the battery immediately. 2. If the lift still does not work correctly, contact Liko.
The lift stops in elevated position.	1. Use the emergency lowering device (marked). 2. If the lift still does not work correctly, contact Liko.
If you hear unusual sounds or discover worn straps.	*Contact Liko*.
The lift reverses appr. 10-20mm after the maximum height is reached.	*Contact Liko.*

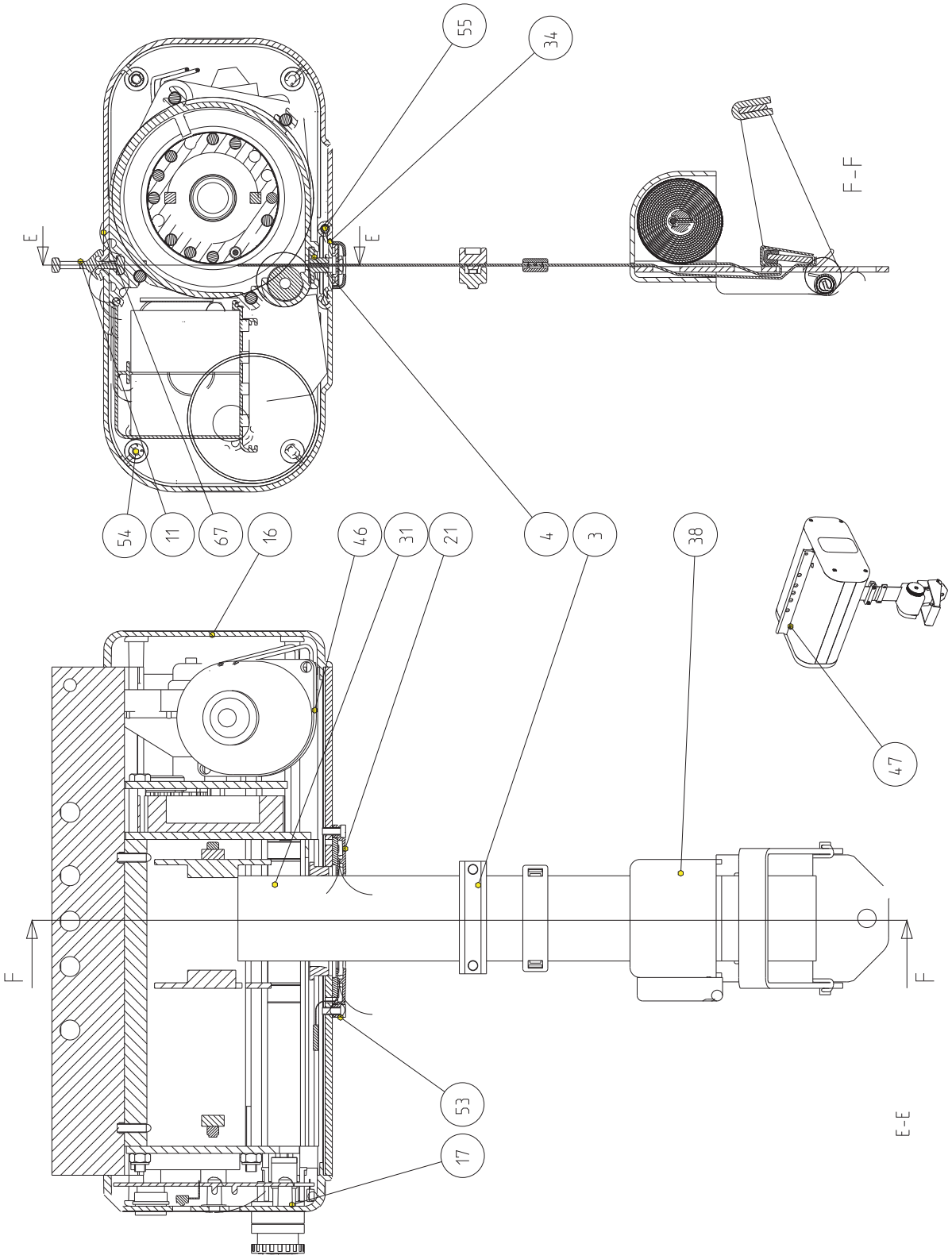
Enkel felsökning
Likorall 242ES/242ES R2R, 242S/242S R2R

Lyften fungerar inte.	1. Kontrollera att nödstoppen ej är intryckt. 2. Ladda batteriet. 3. Kontrollera att handkontrollen sitter fast. 4. Om den fortfarande inte fungerar tillfredsställande, kontakta Liko.
Lyften ger ifrån sig upprepade signaler.	1. Ladda batteriet omgående. 2. Om den fortfarande inte fungerar tillfredsställande, kontakta Liko.
Lyften stannar i högt läge.	1. Använd markerad nödsänkningsanordning. 2. Om den fortfarande inte fungerar tillfredsställande, kontakta Liko.
Om du hör eventuella missljud.	*Kontakta Liko.*
Lyften backar ca 10-20 mm.	*Kontakta Liko.*

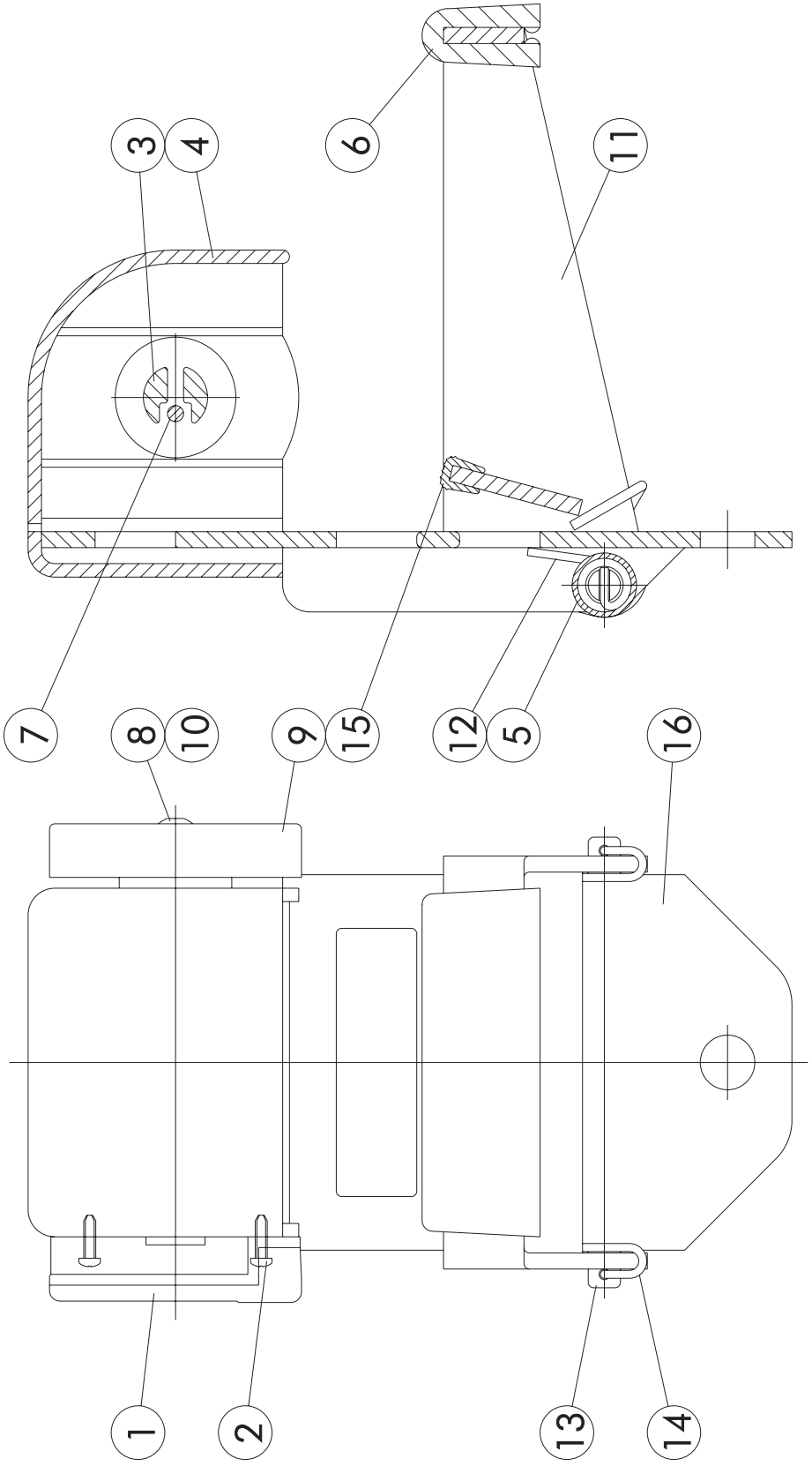
Drawing no. R3001065-5



Drawing no. R3001065-5



Drawing no. R3961204



Checklist for stationary lifts

Customer

No.

Name

Address:

(Zip Code)

City/state

Country

Tel:

Fax:

Customer Reference:

Name

Tel:

Fax:

E-mail:

Text:

Contract no.:

Lift type:

Location:

Serial No:

Manuf. Year:

Check

Pos	System
1	**Installation**
1.1	Ceiling
1.2	Wall
1.3	Upright supports
1.4	Screws/bolts
2	**Weight-bearing components/rail system**
2.1	Ceiling attachment/wall attach./upright supports
2.2	Primary / secondary / rails
2.3	Power unit traverse / motor
2.4	End stops
2.5	Screws /bolts
3	**Power unit**
3.1	Power unit connections
3.2	Lifting range/ limits (parameters)
3.3	Lift strap / slingbar connection
3.4	Hand control
4	**Safety features**
4.1	Emergency lowering device
4.2	Safety hooks slingbar
5	**Power**
5.1	Cables / connectors
5.2	Battery/ charger
5.3	Emergency stop
6	**Documentation**
6.1	Labels / signs
6.2	Instructions / users guides
7	**Other**
7.1	Protective cover
7.2	Notes

Comments:

1. Attention
2. Correct Immediately
3. Do not Use!

Item	System

Load test weight:

Date:

Serviced by:

Liko

8.0

Checklista stationära lyftar

Kund

Kundnr.:

Namn:

Adress:

Postnr.

Ort.

Land:

Tel:

Fax:

Kundreferenser

Namn:

Tel:

Fax:

E-post:

Text:

Avtalsnr.:

Lyfttyp:

Placering:

Tillv.nr.:

Tillv.år:

Kontroll av:

Pos	System
1	**Infästning**
1.1	Tak
1.2	Vägg
1.3	Stödben
1.4	Skruvförband
2	**Bärande delar / Skensystem**
2.1	Takf. / Väggf. / Stolpe
2.2	Primär / Sekundär / Skenor
2.3	Åkvagn Travers / Motor
2.4	Ändstopp
2.5	Skruvförband
3	**Lyftblock**
3.1	Infästning Åkvagn
3.2	Lyftområde / Gränsläge
3.3	Lyftband / Infästning Lyftbygel
3.4	Handkontroll
4	**Säkerhetsanordningar**
4.1	Nödsänkning
4.2	Urkorkningsskydd Lyftbygel
5	**Elektronik**
5.1	Kablage / Anslutningar
5.2	Batteri / Laddningsfunktion
5.3	Nödstopp
6	**Dokumentation**
6.1	Typskylt
6.2	Instruktion / Bruksanvisning
7	**Övrigt**
7.1	Skyddskåpor
7.2	Notering

Anmärkning:

1. Påpekande **2.** Åtgärdas omg.
3. Får ej användas

Pos	System